

Intersection of Airways A593 - B576/Y722 & Y711 (also known as the 'AKARA Corridor')

Please note: This Safety Bulletin is reproduced from the IATA Operations Notice Number: ON 002/2017

This Operational Notice informs and reminds airlines of a unique arrangement over international waters agreed under a 1983 Memorandum of Understanding between China, Japan, Republic of Korea, and ICAO for the management of air traffic in the southern part of the current INCHEON Flight Information Region. The airspace is commonly referred to as the AKARA Corridor.

Instead of responsibility for the control of ALL aircraft operating at the crossing point of air routes A593 and B576/Y722 (position NIRAT) and Y711 (position PONIK) being vested in a single air traffic control unit, it is vested under both the INCHEON Area Control Center (ACC) and the FUKUOKA ACC.

Aircraft operating East/West on A593 are controlled by FUKUOKA ACC¹ (crossing Y711 at position PONIK and B576/Y722 at position NIRAT). Aircraft operating North/South on B576 and Y711 are under the control of INCHEON ACC.

Therefore, crossing traffic is not on the same ATC frequency, nor controlled from the same area control center.

Following the implementation of RVSM in the INCHEON FIR in 2005, the allocation of flight levels on B576/Y711 was increased from 6 to 8 flight levels. Coincident with implementation of RVSM in China, levels available on A593 were also increased to include Flight Levels 300 and 310, while FL410 was replaced by FL400.

It is understood that annually there are approximately 169,000 movements on B576/Y711 and Y722, and 122,000 movements on A593; a dramatic increase over the insignificant traffic numbers of the mid-1980's when the MOU was signed.

Given the above, a very significant concern for operators is an unexpected contingency situation necessitating an emergency descent. ICAO provisions require that ATC will issue immediate traffic information and/or instructions to safeguard aircraft concerned.

1 East of Waypoint SADLI

This is not possible when a controller does not have radio contact with, or control over, all the aircraft operating in the affected airspace underneath.

Obviously, this would not be an issue if the control of all the traffic at the crossing points of A593 with B576/Y722 and Y711 was vested in a single air traffic unit, as is normally the case.

The published outcomes of the Twenty-Second Meeting of the Asia-Pacific Regional Airspace Safety Monitoring Advisory Group (RASMAG/22, 10-13 July 2017, Bangkok) contained the following observations:

The safety assessment of the AKARA Corridor in the southern portion of the Incheon Flight Information Region (FIR) noted that due to the high opposite direction passing traffic frequency, only one vertical deviation per annum of more than 0.125 minutes (approximately 7.5 seconds) would breach the Corridor Target Level of Safety (TLS), highlighting the extreme sensitivity of the airspace to any Large Height Deviation (LHD) event. Moreover, operational factors which may contribute to deviations were noted as including the:

- a. Operation of several Area Control Centers (ACCs) in the same portion of airspace on different frequencies, which is non-compliant with Annex 11;
- b. Possible presence of non-Reduced Vertical Separation Minimum (RVSM) aircraft;
- c. Possibility of turbulence (reported regularly southwest and south of Japan), either not allowing adequate height-keeping, or necessitating a descent or climb;
- d. Lack of any emergency descent procedures;
- e. Possibility of non- or under-reporting (in some cases due to lack of awareness of all traffic due to the Flight Level Allocation Scheme (FLAS));
- f. Lack of voice communication link between Shanghai and Incheon ACCs (including Air Traffic Services (ATS) Inter-Facility Datalink Communication – AIDC); and
- g. Inconsistent use of Strategic Lateral Offset Procedure (SLOP).

Based on the above, The Fifth Meeting of the Asia Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) Air Traffic Management Sub-Group (ATM/SG/5, Bangkok, 31 July-04 August 2017) noted that China, ROK, Japan, and ICAO should endeavour to normalize ICAO standard compliance within the AKARA Corridor.

ATM/SG/5 urged that until the AKARA Corridor arrangements were such that the safety risks were acceptable and compliant with the ICAO standards and relevant States should consider short-term measures.

Operators should note the above information and know that IATA is committed to resolving the situation by continuing to work with the relevant States, ICAO, and operators.

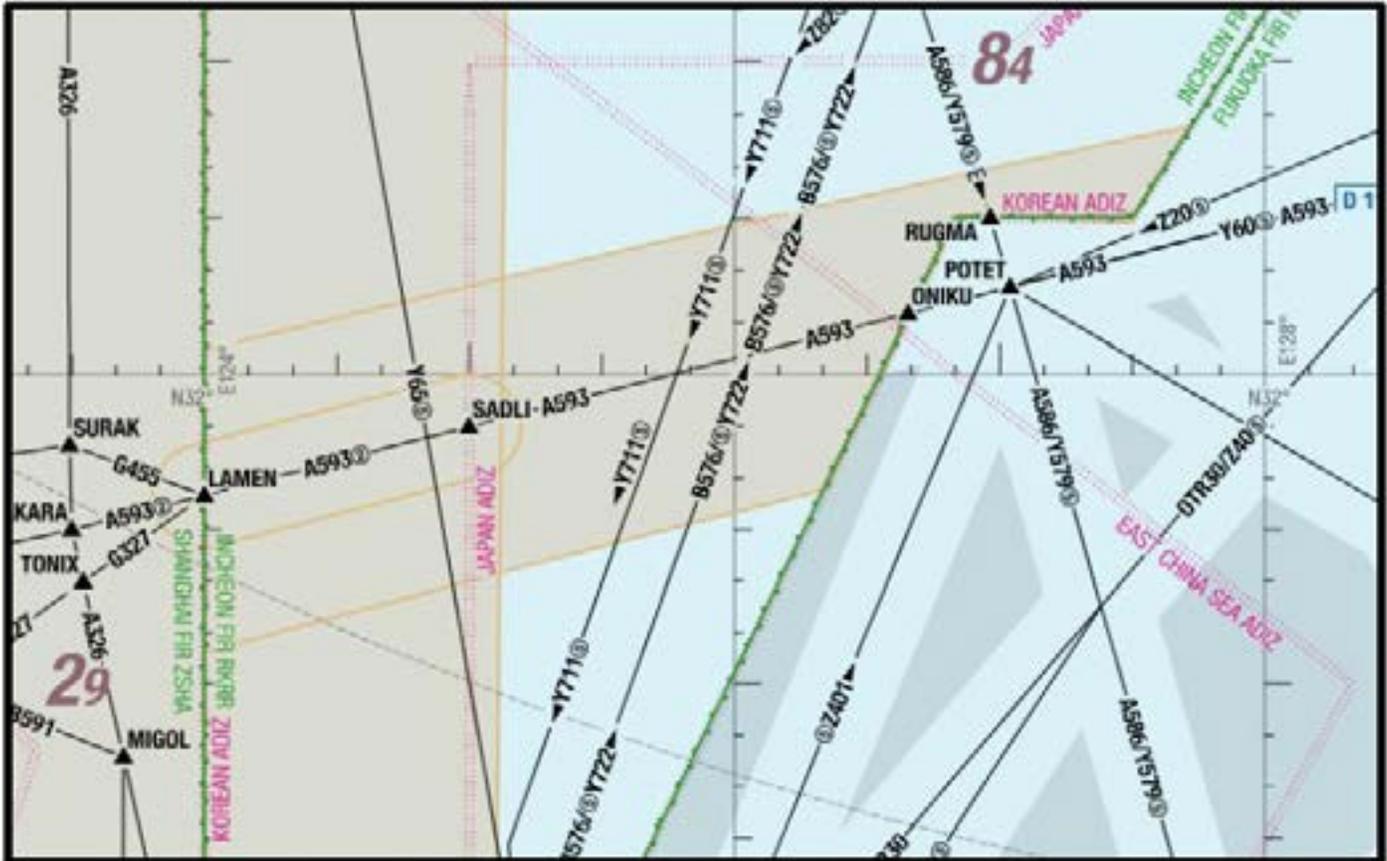


Figure 1 Shanghai ACC hands traffic off to Fukuoka ACC at SADLI on A593 and vice versa. Incheon ACC controls traffic North / southbound on Y711/Y722. Chart ©Lido (2017)

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