



Ministry of Land Infrastructure and Transport  
CIVIL AVIATION BUREAU OF JAPAN



# CRA Activities in Fukuoka FIR

ISPACG/31\_FIT/24

6-9 May, 2017

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JCAB



# Contents

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- *Introduction*
- *New PRs*
- *Reporting address of PRs*



# *Introduction*



# Updates of PRs

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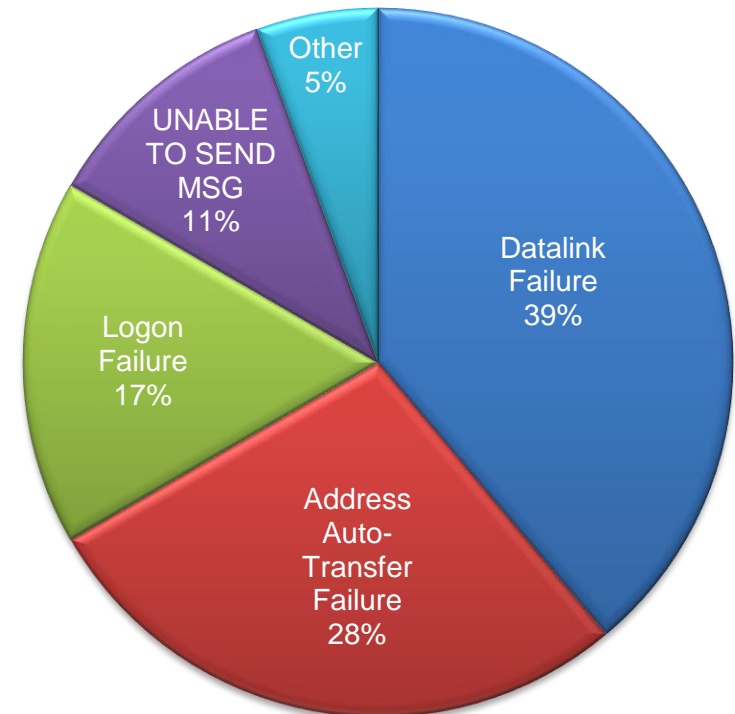
18 PRs were submitted to the CRA Japan from July to December 2016.

- 17 from Operators
- 1 from ANSP (Controller)



# Classifications and percentage of PRs

Problem Classifications	Number	%
Datalink Failure	7	39%
Address Auto-Transfer Failure	5	28%
Logon Failure	3	17%
"UNABLE TO SEND MSG"	2	11%
Other	1	6%
TOTAL	18	100%



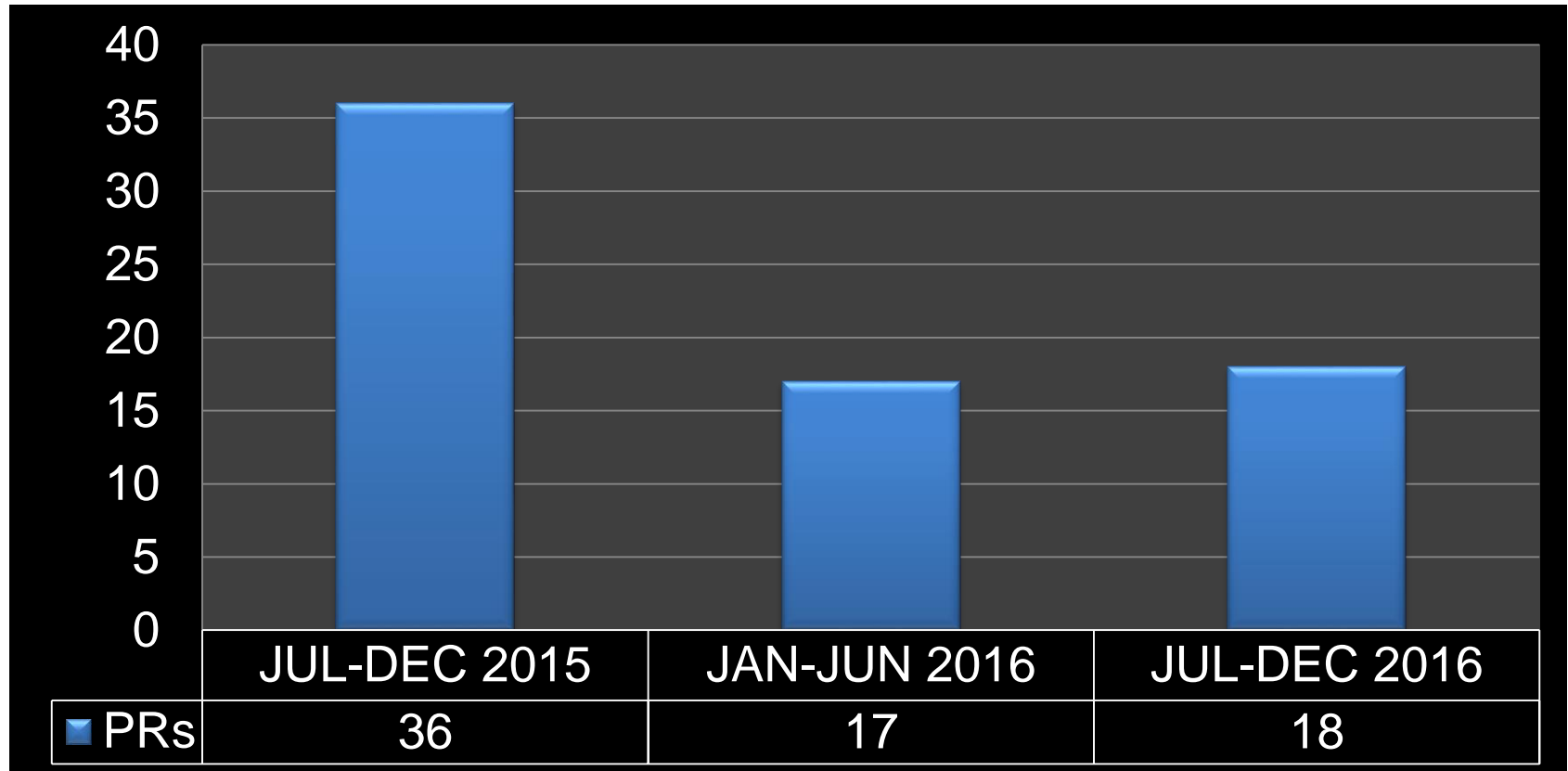
# List of PRs by types of aircraft

TYPE	Problem Classifications	Number		%
<b>B77W</b>	Datalink Failure	2	7	39%
	Address Auto-transfer Failure	4		
	Other	1		
<b>B748</b>	Logon Failure	2	5	28%
	Datalink Failure	3		
<b>B763</b>	"UNABLE TO SEND MSG"	2	3	17%
	Address Auto-transfer Failure	1		
<b>B788</b>	Logon Failure	1	2	11%
	Datalink Failure	1		
<b>B789</b>	Datalink Failure	1	1	6%
<b>TOTAL</b>		18		100%



# Number of PRs

(The last 3 terms)

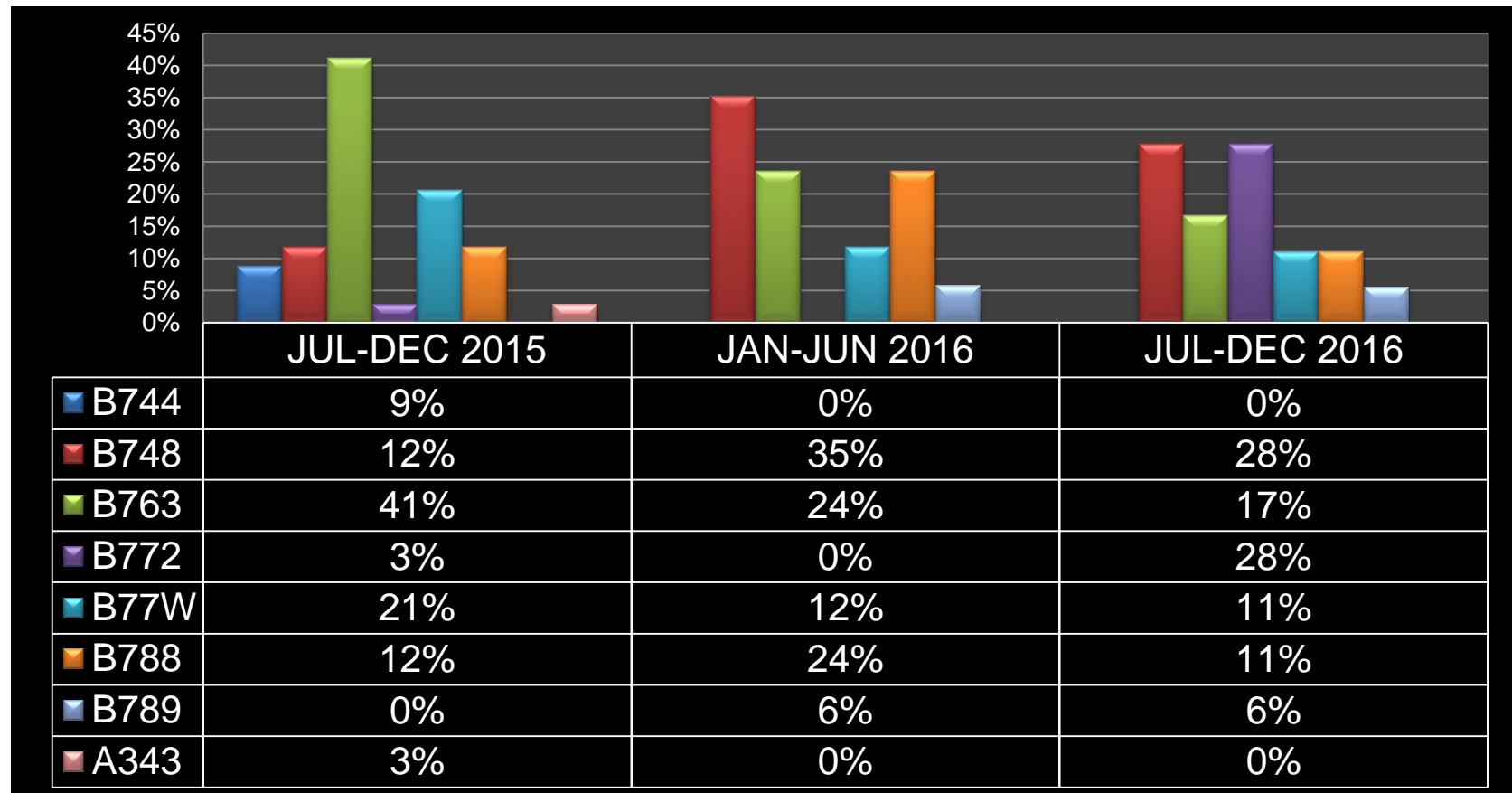


\* 1 term = 6 months



# Percentage of PRs by types of aircraft

(The last 3 terms)



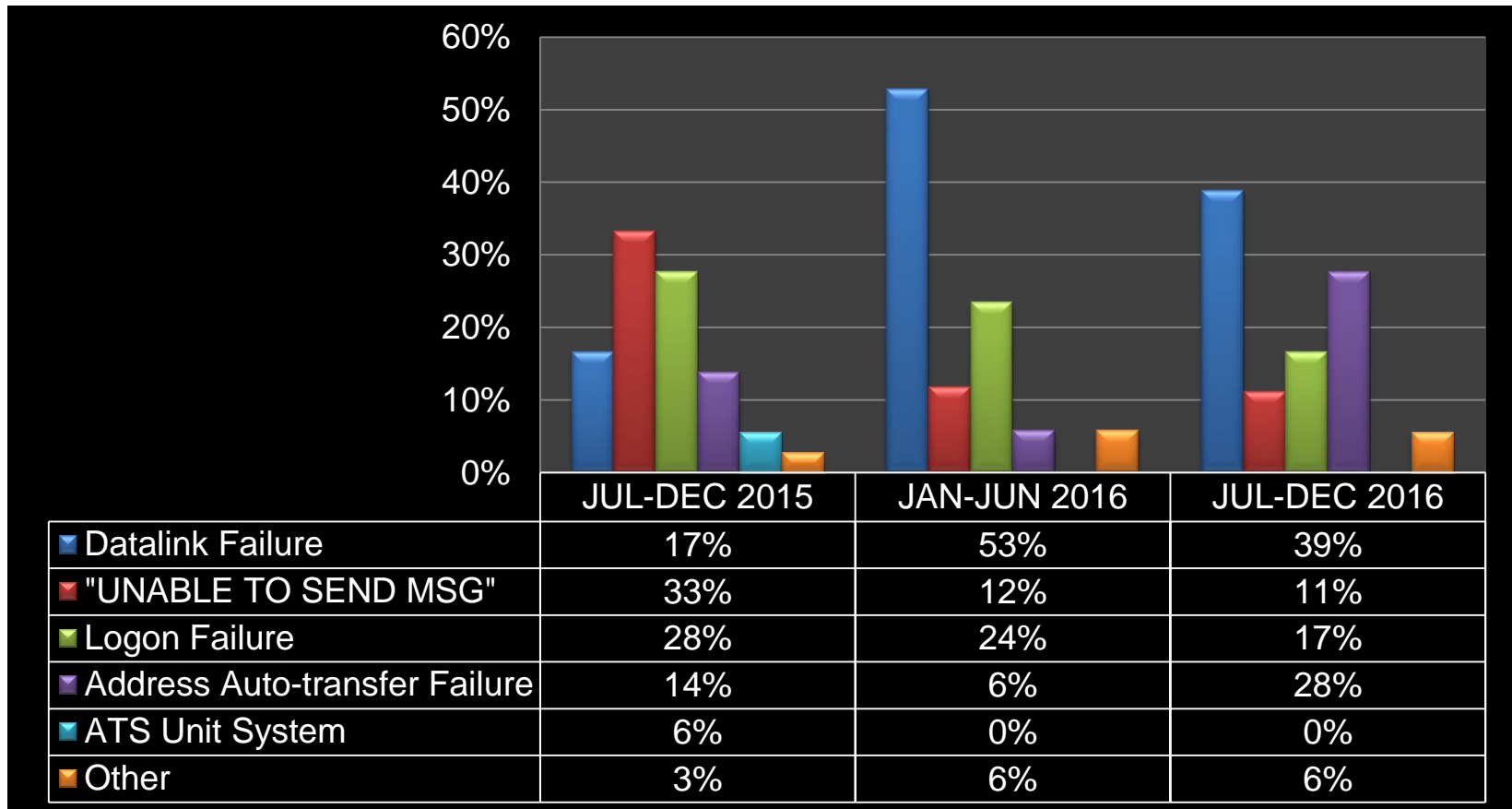
\* 1 term = 6 months





# Percentage of PRs by types of events

(The last 3 terms)



\* 1 term = 6 months



# *New PRs*



# (1) Data Link Failure (#1214)

REPORTED BY : OPERATOR  
TYPE : B747-8

Unable to reply via CPDLC.

◆ STATUS : OPEN

◆ Analysis :

- No abnormality was found in both AFN and ADS.
- Regarding CPDLC, the ground system received multiple “WILCO”s as responses to the ATC clearance.
- Presumed to be caused by a problem with FMC/CMU software.



This seems to be a similar event to “PR 1763-RP”.  
⇒ B748 FMC/CMU (avionics) software issue

## PR 1763-RP, FANS PROBLEM REPORT

- Description:
  - B748 could receive messages, but it was not possible to send responses.
- Status: OPEN / Type: AIR
- Analysis:
  - FMC/CMU (avionics) software issue
  - Responses were actually transmitted, but not recorded as sent on board.
  - PR 1767-AG (Canadian domestic), PR 1878-MM and PR 1879-RP closed as duplicates



## (2) Logon Failure (#1216)

REPORTED BY : OPERATOR

TYPE : B787-8

Could not logon to RPHI or RJJJ. Only “RE-LOGON” message was indicated. The crew tried to COMM RESET / RESTART, but was still unable to logon.

◆ STATUS : CLOSED

◆ Analysis :

- This aircraft tried to AFN logon to RJJJ 4 times, but every logon was rejected by the “Reason Code : 4”.



- The flight ID must be exactly the same as the ICAO flight plan ID.
- The ICAO flight plan ID of this flight was “xxx836”.
- The reason 4-time logon was rejected is that the flight ID was incorrectly input as “xxx0836”.



# PRs due to human error

- Some of the submitted PRs are likely to be attributed to human errors.
- ***Feedback of the investigation result is very important.***
  - ◆ It is important to widely disseminate it within the operator and effectively utilize it for pilot's training, and, in order to prevent similar errors,
  - ◆ It is also effective to directly provide feedback for the person who submitted the PR.



### (3) UNABLE TO SEND MSG

<Case:1> (#1221)

REPORTED BY : OPERATOR

TYPE : B767-300ER

When performing the position report, “UNABLE TO SEND MSG” was displayed on the CDU. According to MOC’s advice, the crew reset the CCB.

◆ Status : OPEN

◆ Precondition :

This operator has already applied “832-9548-012”  
CMU-900 software to all their B767-300ER.

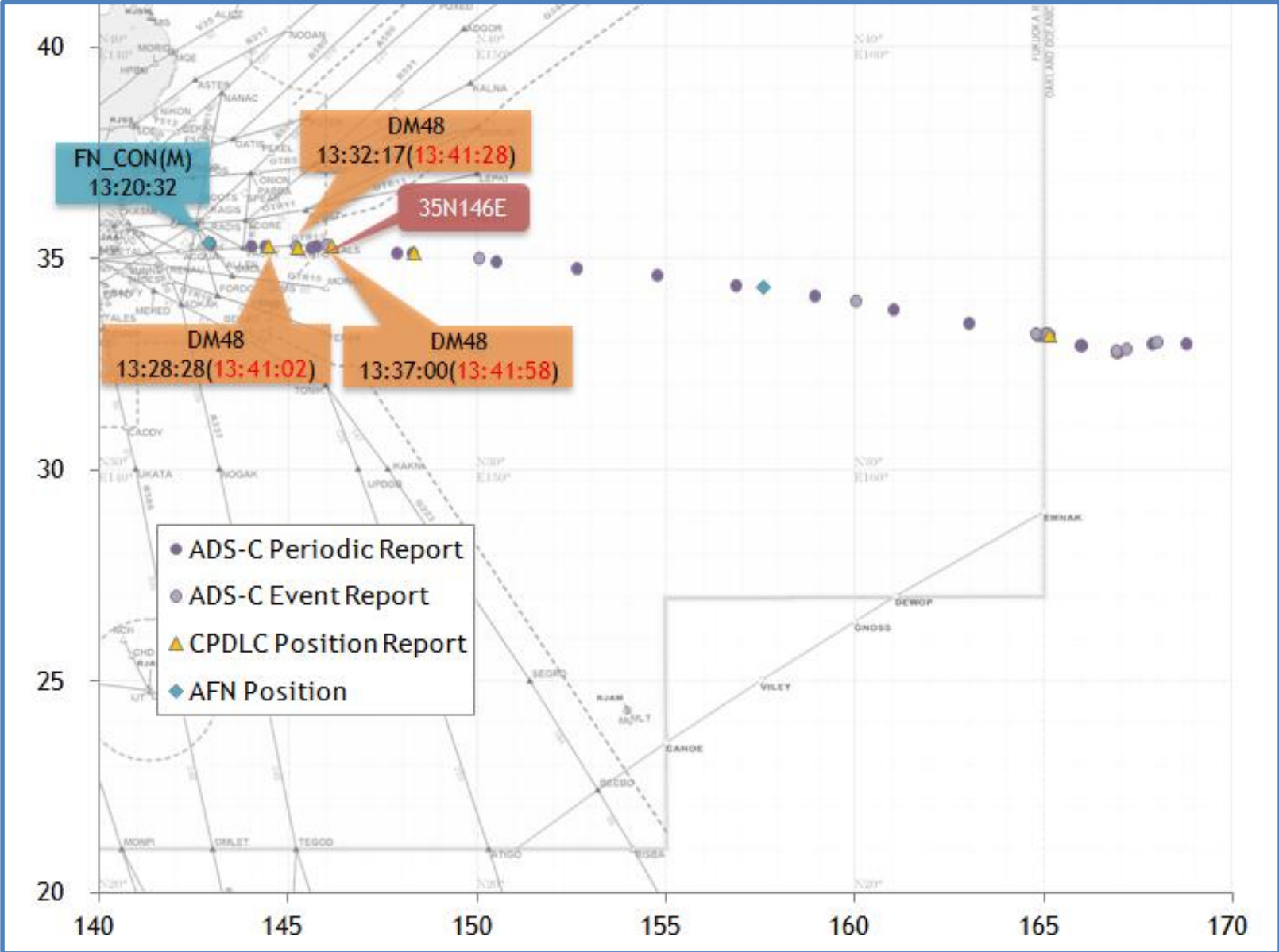




## ◆ Analysis :

- It was confirmed that the delay of the CPDLC message and the ADS-C report had occurred from 13:28 to 13:40.
- It seems that “UNABLE TO SEND MSG” was displayed just around that time.
- According to the AOC message, it seems that the CCB reset was performed around 13:45. However, since the ground system received the delayed downlink message before 13:45, it is considered that the CCB reset was not the reason why the situation improved.
- Since the media switched just around 13:28, it might not have been able to send messages temporarily.





<Case:2> #1222

REPORTED BY : OPERATOR

TYPE : B767-300ER

After passing BUBDO with CPDLC logged on to RJJJ, the crew sent a position report, but “UNABLE TO SEND MSG” was displayed. They attempted to send again but the situation did not change. So they logged off and performed the position report by voice communication. After a while, they logged on again and the position report was successfully sent.

◆ Status : OPEN

◆ Precondition :

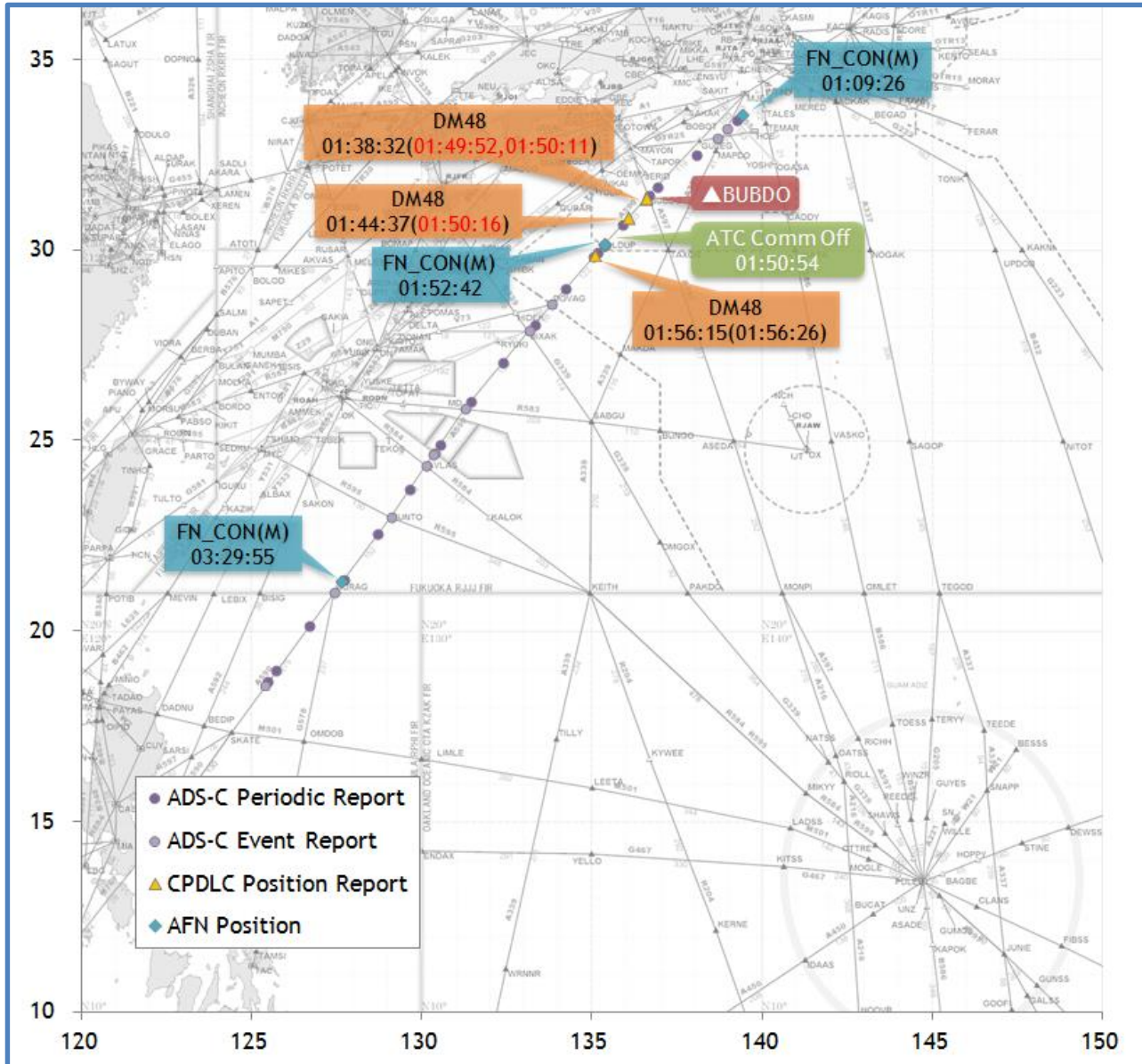
This operator has already applied “832-9548-012” CMU-900 software to all their B767-300ER.



## ◆ Analysis :

- It was confirmed that the delay of the CPDLC message and the ADS-C report had occurred from 01:38 to 01:50.
- It seems that “UNABLE TO SEND MSG” was displayed just around that time.
- According to the communication log, log off and re-logout were performed around 01:50. However, since the ground system received the delayed downlink message before 01:50, it is considered that re-logout was not the reason why the situation improved.
- Since the media switched just around that time, the communication state might have been unstable.





◆ Note :

- Both the events of #1221 and #1222 occurred on the same aircraft (the same tail number).
- Although it is out of the target period, the same event was reported from the same tail number aircraft in January.



# *Reporting address of PRs*



# Reporting address of PRs

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Events occurred in Fukuoka FIR reporting address

E-mail : **[cab-atmccra@ml.mlit.go.jp](mailto:cab-atmccra@ml.mlit.go.jp)**

Central Reporting Agency Japan

JCAB Air Traffic Management Center





# Thank you

