



Attachment

JCAB CRA Activities since IPACG FIT-18

IPACG-32/FIT-19

Honolulu, Hawaii

May 11, 2010

JCAB Central Reporting Agency

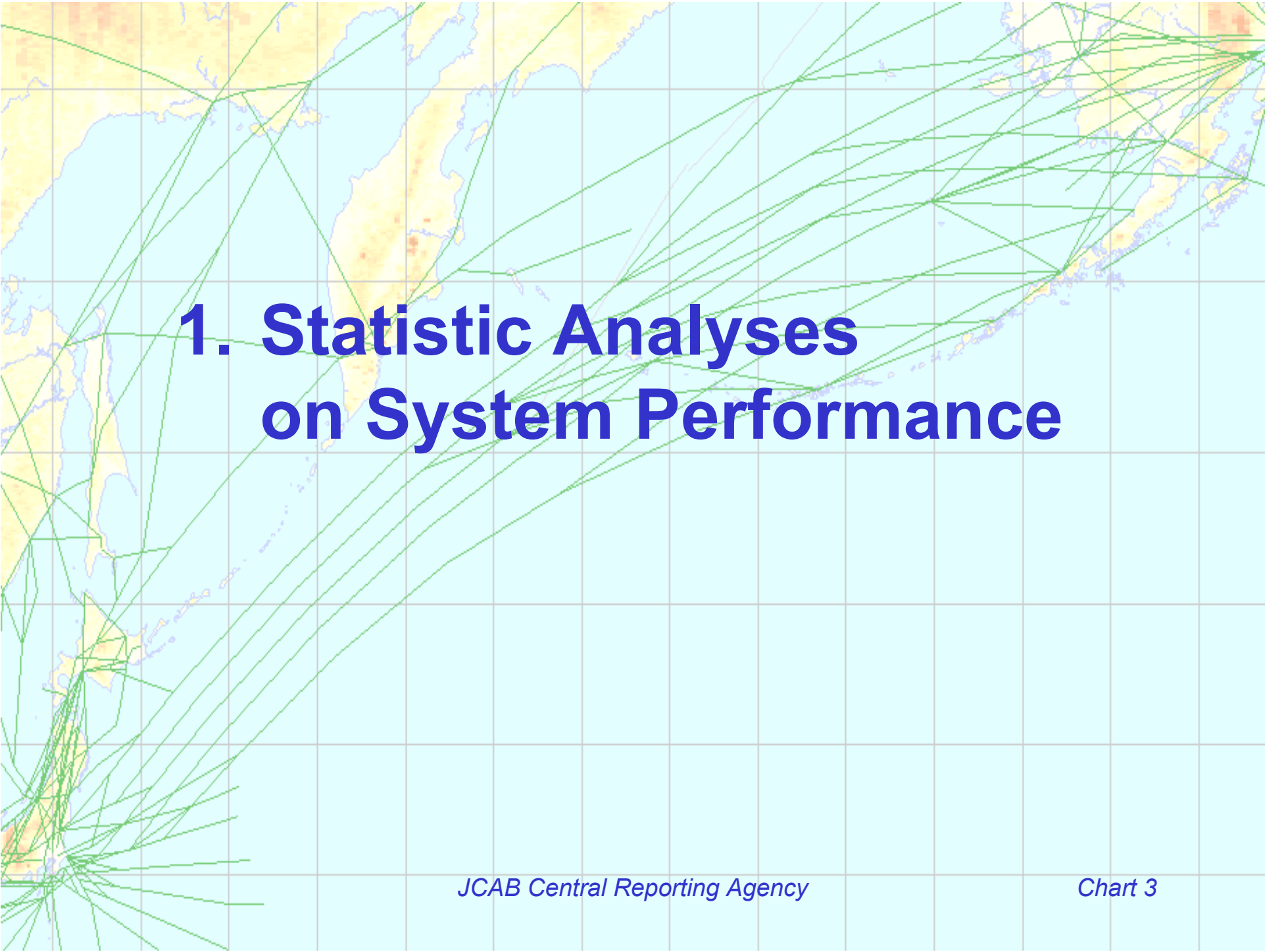
Chart 1



JCAB CRA Activities Since IPACG FIT-18

This presentation contains;

- 1. Statistic Analyses on System Performance**
- 2. Problems Reported since IPACG FIT-18**

A map of the Pacific Ocean region, showing the western coast of North America, Central America, and the western coast of South America. The map is overlaid with a grid of latitude and longitude lines. Numerous green lines represent flight paths, originating from various points along the western coasts and converging towards the eastern coast of Asia, specifically towards Japan and the Korean Peninsula. The text "1. Statistic Analyses on System Performance" is centered over the map in a large, bold, blue font.

1. Statistic Analyses on System Performance



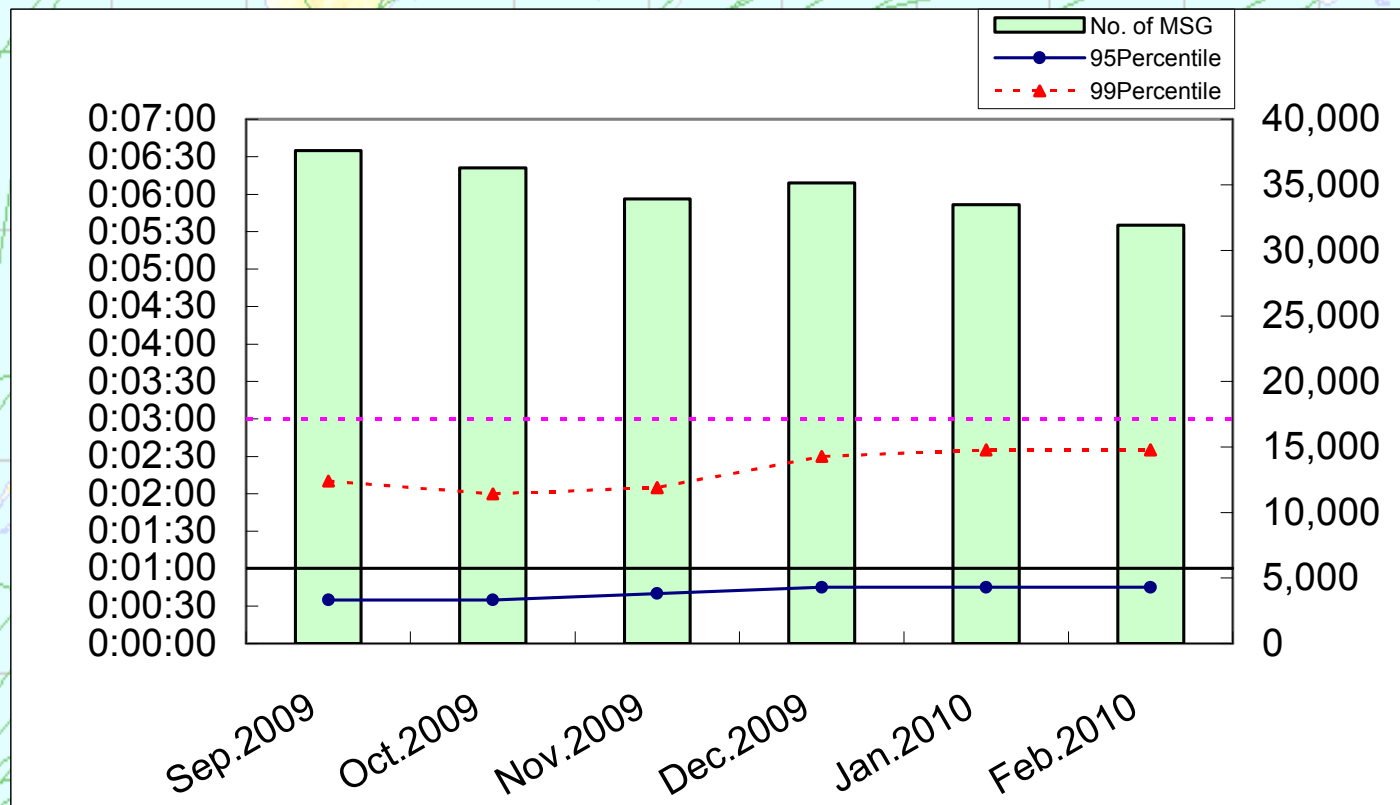
CPDLC System Performance

- ***In this section, we provide CPDLC system performance on:***
 - + CPDLC Downlink Performance
 - + CPDLC Uplink Performance
 - + CPDLC Uplink Message Success Rate
 - + Success Rate of Automatic-Transfer of CPDLC Connections to the Next ATSUs
(Fukuoka ATM Center - Oakland & Anchorage ARTCCs)

CPDLC Downlink Performance

(One-way Trip Time:
Difference of time-stamps between the avionics and ground systems)

(Fig.) CPDLC Downlink 95 & 99 Percentile

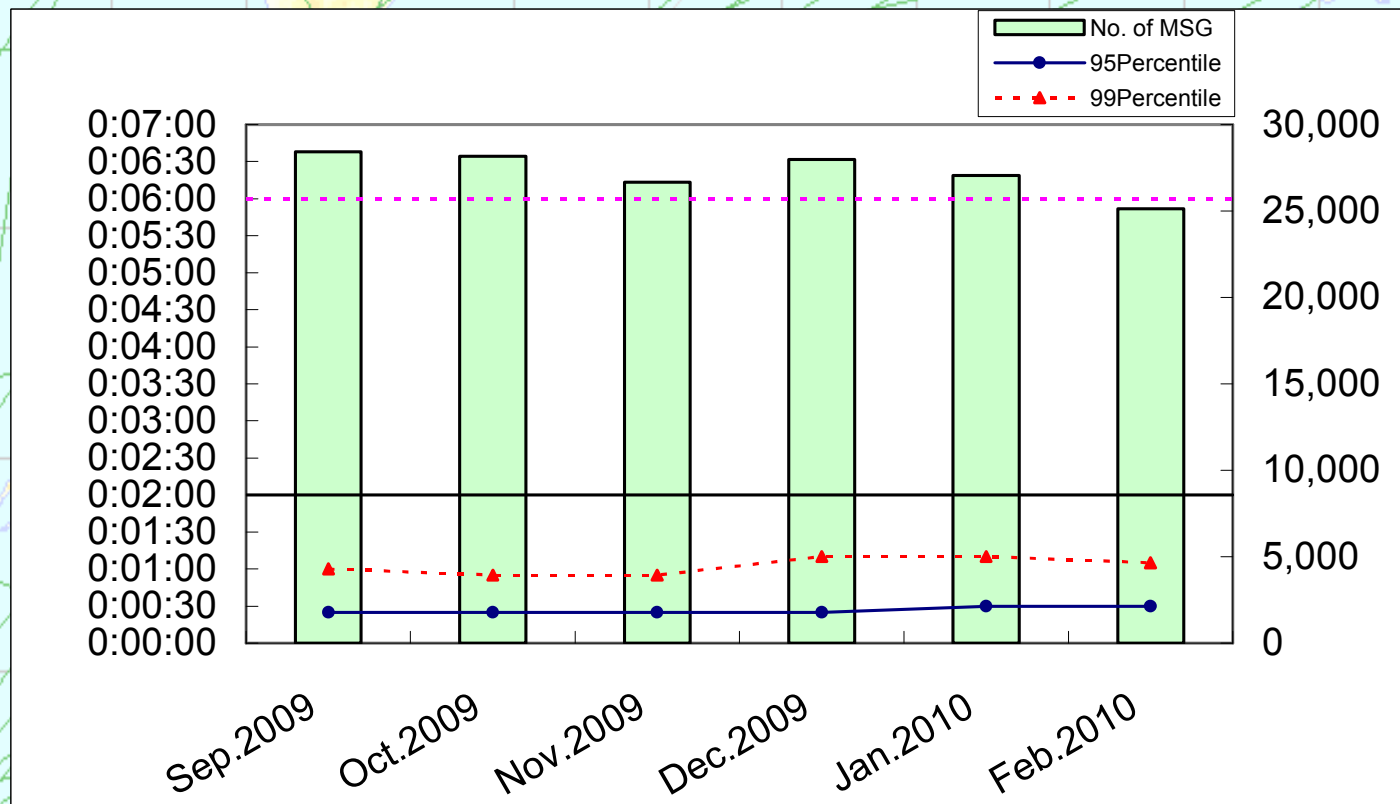


CPDLC Uplink Performance

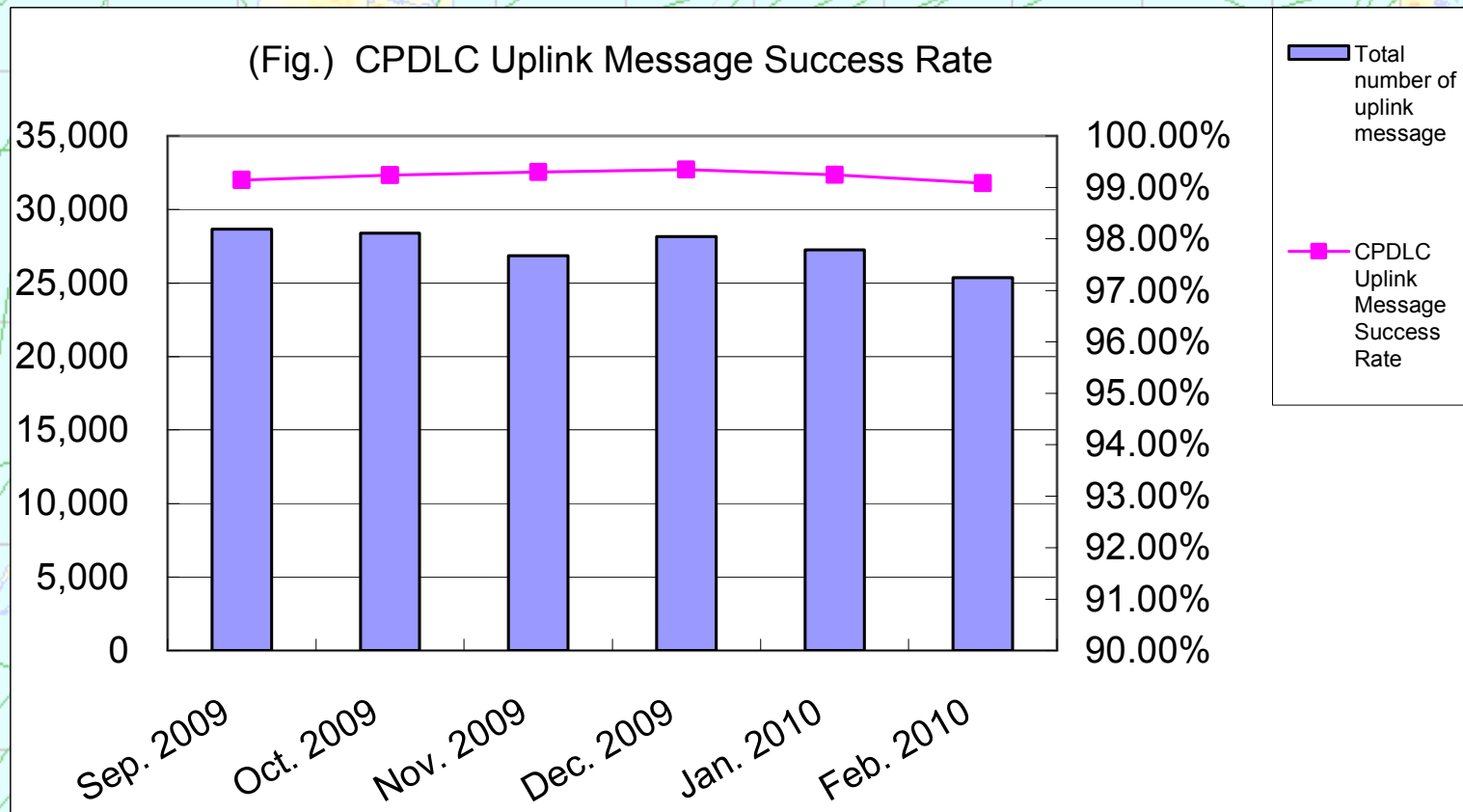
(Round Trip Time:

Transit-delay-time from time-stamp of uplink to receipt time of MAS)

(Fig.) CPDLC Uplink 95 & 99 Percentile

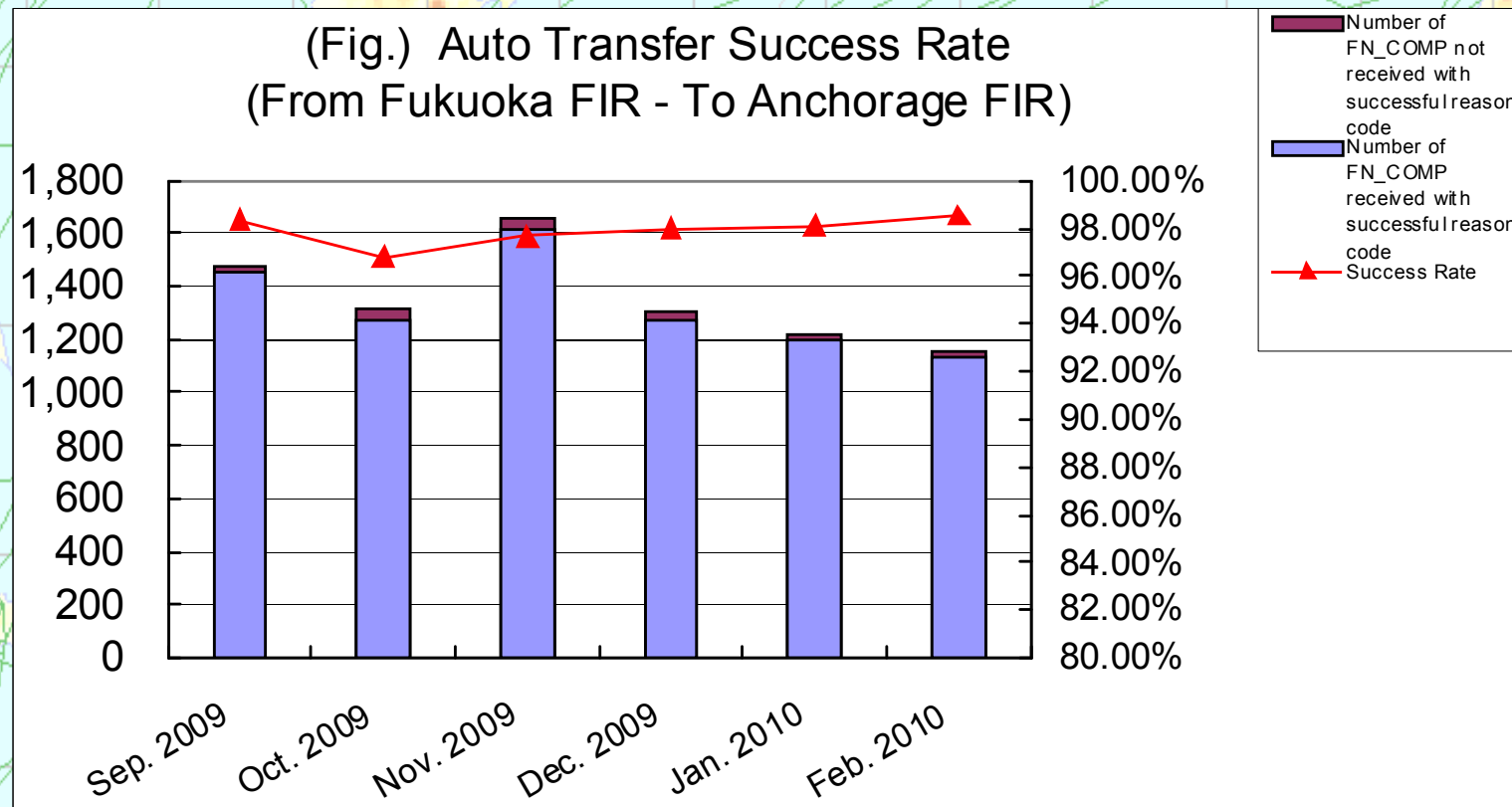


CPDLC Uplink Message Success Rate

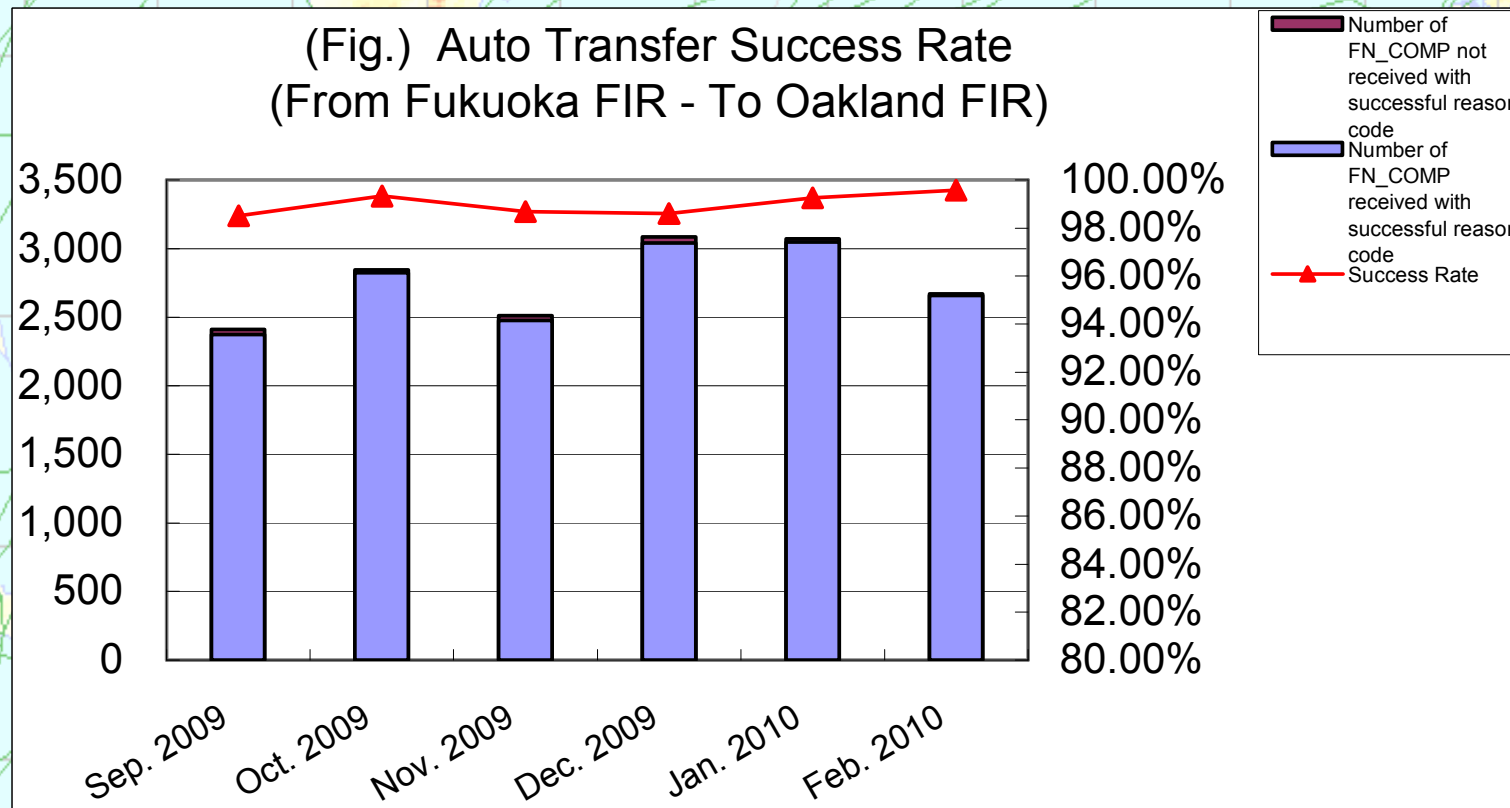


Success Rate of Automatic-Transfer of Connections

(From Fukuoka FIR to Anchorage FIR)



Success Rate of Automatic-Transfer of Connections (From Fukuoka FIR to Oakland FIR)





2. Problem Reports



JCAB CRA Activities Since IPACG FIT-18

- **Updated Problem Reports**
- **New Problem Reports**
- **Specific reports**

Updated PRs

Updated problem reports

PR #	Problem Report Title	Air/ Ground	Comments/Notes/Description	Status	Discuss at FIT/19?
10468	Data link failure	Air/ Ground	ATSU had not uplinked a CPDLC NDA	Open	N
10472	Unable to establish ADS-C	Air	Corrected on FANS A+	Open	Y
10474	Datalink failure	Air/ Ground	• Temporal NO-comm situation • Use of HF DL	Open	N
10497	Delayed Data Transmission	Air/ Ground	Temporal NO-comm situation	Open	N
10498	Delayed Data Transmission	Air/ Ground	Temporal NO-comm situation	Open	N
10501	Delayed Data Transmission	Air/ Ground	Temporal NO-comm situation	Open	N
10509	Incorrect ADS report	Air	ADS reports with default value	Open	Y



Unable to establish ADS-C

PR Number: PR10472

- CPDLC operable, unable to establish ADS-C.
- After the CPDLC reset, ADS remains inoperative until ATSU(=CMU FANS/1) box manually reset.
- Recommended upon the “INVALID DATA” message on the DCDU per the QRH (Quick Reference Handbook).
- Corrected on FANS-A+.



Incorrect ADS reports downlinked

PR Number: PR10509

- An ATSU end system received the incorrect ADS reports.
- The ATSU end system uplinked an ADS demand request in response to the received incorrect ADS report.
- The incorrect ADS reports included default value in ADS predicted route group.
- Amounted to 560 ADS data exchanged between Air/Ground in about two hours.

New PRs

New problem reports

PR #	Problem Report Title	Air/ Ground	Comments/Notes/Description	Status	Discuss at FIT/19?
10514	Data link transfer failure	Air/ Ground	Still under investigation	In progress	N
10515	Data transmission lost	Air	Avionics (CMU) problem	Open	N
10516	Delayed Data Transmission	Air/ Ground	Temporal NO-comm situation	Open	N
10517	Delayed Data Transmission	Air/ Ground	Temporal NO-comm situation	Open	N
10518	Delayed Data Transmission	Air/ Ground	Temporal NO-comm situation	Open	N
10519	Data transmission lost	Air	Avionics (CMU) problem	Open	N
10520	Data transmission lost	Air	Avionics (CMU) problem	Open	N

New PRs

New problem reports

PR #	Problem Report Title	Air/ Ground	Comments/Notes/Description	Status	Discuss at FIT/17?
10521	Data link transfer failure	Air/ Ground	Still under investigation	In progress	N
10522	Delayed Data Transmission	Air/ Ground	Temporal NO-comm situation	Open	N
10523	Delayed Data Transmission	Air	The aircraft does not appear to have used SATCOM.	Open	N
10524	Increased ADS reports	Air/ Ground	ADS periodic rate was augmented.	Open	Y
10525	Unable to talk via SATVOICE	Air	Incorrect ICAO 24 bit ID.	Open	Y
10526	Delayed Data Transmission	Air/ Ground	Still under investigation	In progress	N
10527	Delayed Data Transmission	Air/ Ground	Still under investigation	In progress	N



Specific PRs (New)

- Increased ADS reports.(PR10524)
- Unable to talk via SATVOICE.(PR10525)



Augmented ADS periodic rate

PR Number: PR10524

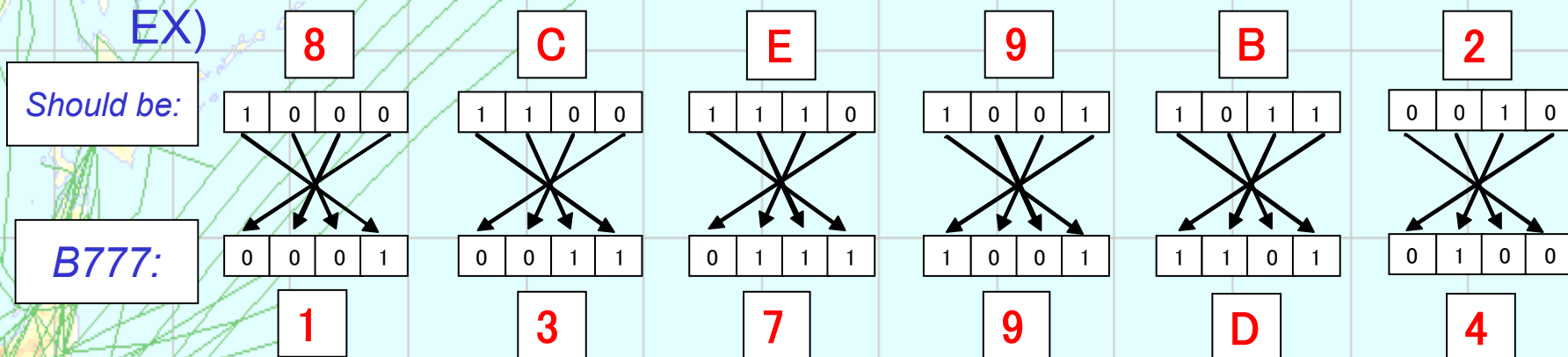
- An airline questioned the number of ADS reports downlinked.
- In the FIR, nominal ADS periodic rate is 9 min 36 sec in considering TLS with RNP4 operation.
(Refer to IPACG/28 WP/15)
- Because ATSU detected the aircraft did not reach the assigned altitude yet, ATSU requested ADS periodic contract with 5 min 20 sec.
- The aircraft deviated because of weather and the ATSU again requested ADS periodic contract with 5 min 20 sec.

Unable to talk via SATVOICE

PR Number: PR10525

- The ATSU extracts SATVOICE number (ICAO 24 bit ID code) out of a FN_CON message.
- The bit order of the ICAO 24 bit ID code put into the AFN FN_CON message was actually reversed on every 4 bits.
- Symptomatic to B777.
- The ICAO 24 bit ID code is set in an optional field of the FN_CON message.

EX)



Questions?
