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Agenda Item 3: Aeronautical Fixed Service

STATUS OF CONMMISSIONING OF AMHS BETWEEN THE UNITED STATES AND JAPAN

(Presented by the United States of America)

SUMMARY

This paper provides information on the status of ATN implementation between the US and Japan and the transition of AFTN service to AMHS service.

1. INTRODUCTION

1.1 During the past few years, the US and Japan have conducted technical and pre-operational trials involving comprehensive ATN router and Air Traffic Message Handling (AMHS) application connection tests. Upon successful completion of these interoperability tests, the US and Japan proceeded to the transition/implementation of AMHS service. This activity was conducted in two phases. Phases I was testing between the Japan Civil Aviation Bureau (JCAB) SDECC (JCAB Test and Evaluation Center) and the FAA Salt Lake City, National Network Control Center (NNCC). Phase II consisted of like testing between the Tokyo Center at Narita Airport and the FAA Salt Lake City, NNCC. All testing was done over a point-point, dedicated 64 Kbps circuit.

2 DISCUSSION

2.1 In March, this year, the FAA and JCAB met in Salt Lake City to develop and define the guidelines/parameters necessary for a successful transition from aeronautical fixed telecommunications network (AFTN) service to AMHS service. The meeting agreed to the procedures for the transition process. This included notification and maintenance policy in the event of a system malfunction, determining what constitutes a significant service outage requiring restoration to AFTN service and the coordination process to return from AFTN to AMHS service. If AMHS service cannot be restored within one hour or not within the same day (approximately eight hours) each State would divert traffic to the AFTN circuit. The policy of diverting traffic to AFTN States would comply with the AFTN routing directory. The procedure to divert traffic is based on existing AFTN operations. The AFTN circuit remains as backup while AMHS is transitioned

2.2 Transition activities began in May, beginning with the router connection and confirmation acceptance. This was followed by the AMHS service transferring traffic between the two States. During this phase JCAB and FAA concluded that because the AMHS is operational only between the US and Japan, there are some modifications to the addressing scheme and procedures that are required. This temporary modification will be restored to ATN Standards and Recommended Practices (SARP) 9705 compliance when other states in the region designate their AMHS service operational.

2.3 The FAA Salt Lake City, NNCC and JCAB SDECC, plan to validate the resolution of these anomalies and to be followed by the transition/implementation of the AMHS service between Narita, Tokyo ACC and FAA Salt Lake City.

2.4 Once both States accept the AMHS service, it will be monitored for 24 hours. If there are no problems and both States agree after completion of the monitoring sequence of AMHS and the ATN router, the service will be deemed operational.

3. CONCLUSION

3.1 Once US and Japan accept commission of the AMHS service, the AMHS will carry aeronautical messages between the US and Japan, thus becoming part of the Aeronautical Fixed Service infrastructure and the first implementation of AMHS worldwide.
