



ICAO

International Civil Aviation Organization

Eleventh Meeting of the Aeronautical Communication Services Implementation Coordination Group (ACSICG/11)

Bangkok, Thailand, 19 - 22 March 2024

Agenda Item 4: AMHS/AFTN routing issues and coordination with ATS Messaging Management Centre (AMC)

UPDATE ON AFTN/ATSMHS ROUTING DIRECTORY IN APAC

(Presented by the Secretariat)

SUMMARY

This paper presents the current status of the AFTN/ATSMHS routing directory for review and update.

1. INTRODUCTION

1.1 As an established practice in the past decades, the ICAO Asia and Pacific Regional Office has prepared and published AFTN Routing Directory for 29 times. The recent publications since 1996 are highlighted as following:

20th edition - November 1996
 21st edition - November 1999
 22nd edition - January 2001
 23rd edition - December 2001
 24th edition - May 2003
 25th edition - January 2004
 26th edition - April 2007
 27th edition - August 2007
 28th edition - July 2018
 29th edition – September 2022

1.2 The Routing Directory usually comprised the explanatory notes, the routine directory (the table), AFTN circuits and a chart (AFTN Plan). Implementation Status of Automatic Message Switching Facilities was also monitored in the early 2000s.

1.3 The current Routing Directory is based on the existing AFTN circuits in the Asia and Pacific regions, which employs store/forward methodology, and the responsibilities for relaying/forwarding messages are assigned to each individual AFTN centre/station of States.

2. DISCUSSIONS

2.1 The AFTN Routing Directory was renamed to AFTN/ATSMHS Routing Directory for Asia and Pacific Regions by ACSICG/5.

2.3 The CRV OG/5 meeting reviewed the function and role of AFTN/ATSMHS routing directory during the transition period from point-to-point connection supporting AFTN/ATSMHS to CRV environment. Once CRV is fully implemented in the Region, further routing directory changes would be required as more and more direct connections via VPN would be possible and the relation between the routing directory and the directory service registered in AMC should be addressed.

2.4 The CRV OG/5 meeting recognized that if direct routing was allowed in the mixed environment by end of 2020, i.e., direct routings are only implemented for those States/Administrations who have joined CRV while for those States/Administrations not joining CRV yet are still required to follow the current routing directory. As result of discussion, the meeting agreed to fully follow the AFTN/ATSMHS routing directory during the transition period by end of 2020. In such case, the efficiency and benefits of joining CRV would be delayed. For inter-regional traffic, it is needed to follow entry/exit points and the agreed traffic exchanged between regions according to existing procedure and routing directory until such time, inter-regional IPS based network like CRV are established.

2.5 The ACSICG/6 meeting and the CNS SG/23 meeting further reviewed the role of AFTN/ATSMHS Routing Directory during transition period, as result of discussions, the CNS SG/23 meeting **agreed to fully follow the AFTN/ATSMHS routing directory**. For inter-regional traffic, it is required to follow the existing entry/exit points and procedure.

2.6 The ACSICG/9 meeting reviewed the AFTN/ATSMHS Routing Directory (28th Edition AFTN Routing Directory), and incorporated revisions proposed by Philippines, USA, Australia and Hong Kong China. The 29th edition of AFTN/ATSMHS Routing Directory for Asia and Pacific Regions formulated by ACSICG/9 was adopted by CNS SG/26 meeting through Conclusion **CNS SG/26/03 (ACSICG/09/04) - Revised AFTN/ATSMHS Routing Directory**, which is posted on the ICAO APAC website under e-Document at:
https://www.icao.int/APAC/Documents/edocs/AFTN-ATSMHS%20Routing%20Directory_29th%20edition.pdf

2.7 The ACSICG/10 only updated the AFTN/ATSMHS Routing Directory on connections (page 26-31 of the 29th AFTN/ATSMHS Routing Directory), no changes to the routing table (page 5-25 of the 29th AFTN/ATSMHS Routing Directory) were proposed during the meeting. The routing directory published as APPENDIX E of ACSICG/10 final report is provided in **Attachment A** to this paper.

2.8 On 29 August 2023, Russia informed ICAO APAC Office on inconsistencies between "AFTN/ATSMHS ROUTING DIRECTORY ASIA AND PACIFIC REGIONS" (Appendix B of the CNS SG/26 Report, September 2022) and the real routing settings. Together with the Fukuoka Centre, Russia COM Centre proposed to correct the tables "AFTN/ATSMHS ROUTING DIRECTORY ASIA AND PACIFIC REGIONS" for the UHHH and UUUU centres on pages 13 and 14, which is provided in **Attachment B** to this paper.

2.9 With the proposal from Russia, ICAO APAC Office incorporated the amendment into the routing table, the updated table is provided in **Attachment C** to this paper.

2.10 For years, an ICAO computer tool, Routing Manager, has been used for AFTN routing management and generating the table for routing directory publication. Unfortunately, the MS Windows 7 based old computer for running Routing Manager failed in January 2024. The ICAO APAC CNS has been closely working with ICT to recover the system. However, if there are any new changes to the routing table (page 5-25), the publication of the 30th edition of AFTN/ATSMHS Routing Directory for

Asia and Pacific Regions in 2024 may be delayed.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) review and update the AFTN/ATSMHS CONNECTIONS_ASIA/PAC ROUTING DIRECTORY provided in **Attachment A**;
- b) note the proposed changes to the 29th AFTN/ATSMHS Routing Directory provided in **Attachment B**;
- c) review and update the routing table provided in **Attachment C**; and
- d) discuss any relevant matter as appropriate.

AFTN/ATSMHS CONNECTIONS- ASIA/PAC ROUTING DIRECTORY

Terminal 1 (^ - BBIS)	Terminal II	ATSMHS or AFTN	Over CRV (Y/N)
Apia/Faleolo	Christchurch	AMHS/UA	N
Bangkok^	Beijing	AMHS	N
	Mumbai	AMHS	Y
	Dhaka	AMHS	N
	Ho-Chi-Minh	AFTN	N
	Hong Kong	AMHS	Y
	Kuala Lumpur	AMHS	Y
	Phnom Penh	AMHS	N
	Rome	AMHS	N
	Yangon	AMHS	N
	Singapore	AMHS	Y
	Vientiane	AMHS	N
	Paro	AMHS	Y
Beijing^	Bangkok	AMHS	N
	Fukuoka	AMHS	Y
	Guangzhou	AFTN	N
	Hong Kong	AMHS	Y
	Karachi	AFTN	N
	Khabarovsk	AFTN	N
	Kathmandu	AFTN	N
	Mumbai	AMHS	N Y
	Pyongyang	AFTN	N
	Seoul	AMHS	N
	UlaanBaatar	AFTN	N
	Yangon	AFTN	N
Brisbane^	Christchurch	AMHS	Y
	TimorLeste	AFTN/UA	N
	Jakarta	AFTN	N
	Johannesburg	AMHS	N
	Honiara	AFTN/UA	N
	Nadi	AMHS	Y
	Nauru	AFTN/UA	N
	Port Moresby	AFTN	Y
	Port Vila	AFTN/UA	N
	Singapore	AMHS	Y
	USA	AMHS	Y
Brunei	Kuala Lumpur	AFTN	N
	Singapore	AFTN	N
Chennai	Mumbai	AFTN	N
	Kolkata	AFTN	N
	Kuala Lumpur	AFTN-Not in Operation	N

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Attachment A to WP04

Terminal 1 (^ - BBIS)	Terminal II	ATSMHS or AFTN	Over CRV (Y/N)
Christchurch	Apia/Faleolo	AMHS/UA	N
	Niue	AMHS/UA	N
	Rarotonga	AMHS/UA	N
	Brisbane	AMHS	Y
	Papeete/Tahiti	AFTN	N
	Tonga/Fua' Amotu	AMHS/UA	N
	USA	AMHS	Y
Chuuk	USA	AMHS/UA	N
Colombo	Mumbai	AMHS	N
	Male	AFTN	N
	Singapore	AFTN	N
Delhi	Mumbai	AFTN	N
	Kolkata	AFTN	N
	Tashkent Not in Operation	AFTN	N
Dhaka	Bangkok	AMHS	N
Fukuoka^	Beijing	AMHS	Y
	Hong Kong	AMHS	Y
	Moscow	AFTN	N
	Seoul	AFTN	N
	Singapore	AMHS	Y
	Taipei	AMHS	Y
	USA	AMHS	Y
Guangzhou	Beijing	AFTN	N
	Hong Kong	AFTN	N
	Macau	AFTN	N
	Haikou	AFTN	N
	Hanoi	AFTN	N
Hanoi	Ho-Chi-Minh	AFTN	N
	Vientiane	AFTN	N
	Guangzhou	AFTN	N
Haikou	Guangzhou	AFTN	N
	Hong Kong	AFTN	N
Ho-Chi-Minh	Bangkok	AFTN	N
	Hanoi	AFTN	N
	Hong Kong	AFTN	N
	Singapore	AFTN	N
	Manila	AFTN	N
	Phnom Penh	AFTN	N
Hong Kong^	Bangkok	AMHS	Y
	Beijing	AMHS	Y
	Guangzhou	AFTN	N

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Attachment A to WP04

Terminal 1 (^ - BBIS)	Terminal II	ATSMHS or AFTN	Over CRV (Y/N)
	Ho-Chi-Minh	AFTN	N
	Macau	AMHS	N
	Manila	AMHS	Y
	Haikou	AFTN	N
	Taipei	AMHS	Y
	Fukuoka	AMHS	Y
Honiara	Brisbane	AMHS/UA	N
Jakarta	Brisbane	AFTN	N
	Singapore	AMHS	N
Karachi	Beijing	AFTN	N
	Mumbai	AMHS	N
	Kabul	AFTN	N
	Kuwait	AMHS	N
	Tehran (Not listed in the ANP AFTN Planning Table)	AFTN	N
	Muscat	AFTN	N
Kathmandu	Beijing	AFTN	N
	Mumbai	AMHS	NY
Kolkata	Mumbai	AFTN	N
	Delhi	AFTN	N
	Chennai	AFTN	N
Koro	USA	AMHS/UA	N
Kosrae	USA	AMHS/UA	N
Kuala Lumpur	Bangkok	AFTN	N
	Brunei	AFTN	N
	Singapore	AFTN	N
	Chennai - Not in operation	AFTN	N
Macau	Guangzhou	AFTN	N
	Hong Kong	AMHS	N
Majuro	USA	AMHS/UA	N
Male	Colombo	AFTN	N
Manila	Hong Kong	AMHS	Y
	Ho Chi Minh	AFTN	N
	Singapore	AMHS	Y
	Taipei	AMHS	Y
	USA	AMHS	Y
Mumbai [^]	Bangkok	AMHS	NY

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Attachment A to WP04

Terminal 1 (^ - BBIS)	Terminal II	ATSMHS or AFTN	Over CRV (Y/N)
	Dhaka	AMHS	N
	Kolkata	AFTN	N
	Colombo	AMHS	N
	Delhi	AFTN	N
	Karachi	AMHS	N
	Kathmandu	AMHS	N Y
	Beijing	AMHS	N Y
	Chennai	AFTN	N
	Muscat/Seeb	AMHS	N
	Nairobi	AFTN	N
	Paro	AMHS	N Y
	Singapore	AMHS	N Y
Nadi [^]	Brisbane	AMHS	Y
	Funafuti	AMHS/UA	N
	Noumea	AMHS	N
	Tarawa	AMHS/UA	N
	USA	AMHS	Y
	Wallis Is.	AMHS/UA	N
Nauru	Brisbane	AMHS/UA	N
Niue	Christchurch	Email	N
Noumea	Nadi	AMHS	N
Pago Pago	USA	AMHS/UA	N
Papeete/Tahiti	Christchurch	AFTN	N
Paro	Mumbai	AMHS	N Y
	Bangkok	AMHS	N
Phnom Penh	Bangkok	AMHS	N
	Ho Chi Minh	AFTN	N
Pohnpei	USA	AMHS/UA	N
Port Moresby	Brisbane	AFTN	Y
Port Vila	Brisbane	AMHS/UA	N
Pyongyang	Beijing	AFTN	N
Rarotonga	Christchurch	AFTN	N
Salt Lake City [^]	Brisbane	AMHS	Y
	Christchurch	AMHS	Y
	Chuuk	AMHS UA	N
	Fukuoka	AMHS	Y
	Koro	AMHS UA	N

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Attachment A to WP04

Terminal 1 (^ - BBIS)	Terminal II	ATSMHS or AFTN	Over CRV (Y/N)
	Kosrae	AMHS UA	N
	Majuro	AMHS UA	N
	Manila	AMHS	Y
	Nadi	AMHS	Y
	Pago Pago	AMHS UA	N
	Pohnpei	AMHS UA	N
	Yap	AMHS UA	N
Seoul	Beijing	AMHS	N
	Fukuoka	AFTN	N
Singapore^	Bangkok	AMHS	Y
	Bahrain	AFTN	N
	Brisbane	AMHS	Y
	Brunei	AFTN	N
	Colombo	AMHS	N
	Ho-Chi-Minh	AFTN	N
	Jakarta	AMHS	N
	Kuala Lumpur	AMHS	Y
	London	AMHS	N
	Manila	AMHS	Y
	Mumbai	AMHS	Y
	Fukuoka	AMHS	Y
Taipei	Hong Kong	AMHS	Y
	Manila	AMHS	Y
	Fukuoka	AMHS	Y
Tarawa	Nadi	AMHS/UA	N
Timor Leste	Brisbane	AMHS	N
Tonga/Fua'Amotu	Christchurch	AMHS/UA	N
UlaanBaatar	Beijing	AFTN	N
	Irkutsk	AFTN	N
Vientiane	Bangkok	AMHS	N
	Hanoi	AFTN	N
Wallis Is.	Nadi	(planning)	-
Yangon	Bangkok	AMHS	N
	Beijing	AFTN	N
Yap	USA	AMHS/UA	N

Note: Interregional connections are highlighted in yellow

Appendix A of attachment B

Inconsistencies between the document "AFTN/ATSMHS ROUTING DIRECTORY ASIA AND PACIFIC REGIONS" (Appendix B of the CNS SG/26 Report, September 2022) and the actual routing

DESTINATION	ORIGIN	UHHH	UUUU
AG	UU	zb	RJ n
AN	UU	zb	RJ n
AY	UU	zb	RJ n
B	UU	zb	BT (N) BT (N)
C	UU	zb	EG (N) BT (N)
D	UU	zb	LF (N) BT (N)
E	UU	zb n	(N) BT (N)
F	UU	zb n	LF (N) BT (N)
G	UU	zb n	LE (N) BT (N)
H	UU	zb n	LG (N) BT (N)
K	UU	zb	RJ n
L	UU	zb n	(N) BT (N)
M	UU	zb	EG (RJ) n
NC	UU	zb n	RJ n
NF (EX. (EX. NFT)	UU	zb n	RJ n
NFT	UU	zb n	RJ n
NG (EX. NGF)	UU	zb n	RJ n
NGF	UU	zb n	RJ n
NI	UU	zb n	RJ n
NL	UU	zb n	RJ n
NS (EX. NST)	UU	zb n	RJ n
NST	UU	zb n	RJ n
NT	UU	zb n	RJ n
NV	UU	zb n	RJ n
NW	UU	zb n	RJ n
NZ	UU	zb n	RJ n
OA	UU	n	LE (N) n
OB	UU	n	LE (N) n
OE	UU	n	LE (N) n
OI	UU	n	LE (N) n
OJ	UU	n	LE (N) n
OK	UU	n	LE (N) n
OL	UU	n	LE (N) n
OM	UU	n	LE (N) n
OO	UU	n	LE (N) n
OP	UU	n	LE (N) n
OR	UU	n	LE (N) n

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Attachment B to WP/04

OS	UU	n	LC (N)	n
OT	UU	n	LC (N)	n
OY	UU	n	LC (N)	n
P	UU	zb	EG (N)	n
RC	UU	zb	RJ	n
RJ,RO	UU	zb	RJ	n
RK	UU	zb	RJ	n
RP	UU	zb	RJ	n
S	UU	zb	LE (N)	n
T	UU	zb	EG (N)	n
U (EX. UH UI UT UE UN)	(N)	n	(N)	n
UH,UE,UN	(N)	n	(N)	n
UI	(N)	n	(N)	n
UT	(N)	n	UA	un
VA	ZB	n	RJ	uh
VC	ZB	n	RJ	uh
VD	ZB	n	RJ	uh
VE	ZB	n	RJ	uh
VG	ZB	n	RJ	uh
VH	ZB	n	RJ	uh
VI	ZB	n	RJ	uh
VL	ZB	n	RJ	uh
VM	ZB	n	RJ	uh
VN	ZB	n	RJ	uh
VO	ZB	n	RJ	uh
VQ	ZB	n	RJ	uh
VR	ZB	n	RJ	uh
VT	ZB	n	RJ	uh
VV (EX. VVT)	ZB	n	RJ	uh
VVT	ZB	n	RJ	uh
VY	ZB	n	RJ	uh
WA	UU	zb	RJ	n
WB (EX. WBA WBS)	UU	zb	RJ	n
WBA WBS	UU	zb	RJ	n
WI	UU	zb	RJ	n
WM	UU	zb	RJ	n
WP	UU	zb	RJ	n
WR	UU	zb	RJ	n
WS	UU	zb	RJ	n
Y	UU	zb	RJ	n
Z (EX. ZG ZJ ZK ZM)	ZB	n	RJ UH	uh rj
ZG	ZB	n	RJ UH	uh rj
ZJ	ZB	n	RJ UH	uh rj
ZK	ZB	n	RJ UH	uh rj
ZM	UH ZB	zb ui	UI	uh

Appendix B of attachment B

Proposed version of the ICAO APAC Routing Directory table (pages 13 and 14)
for ORIGIN UUUU and UHHH

DESTINATION	ORIGIN	UHHH	UUUU
AG	UU	zb	RJ n
AN	UU	zb	RJ n
AY	UU	zb	RJ n
B	UU	zb	(N) (N)
C	UU	zb	(N) (N)
D	UU	zb	(N) (N)
E	UU	n	(N) (N)
F	UU	n	(N) (N)
G	UU	n	(N) (N)
H	UU	n	(N) (N)
K	UU	zb	RJ n
L	UU	n	(N) (N)
M	UU	zb	RJ n
NC	UU	n	RJ n
NF (EX. (EX. NFT)	UU	n	RJ n
NFT	UU	n	RJ n
NG (EX. NGF)	UU	n	RJ n
NGF	UU	n	RJ n
NI	UU	n	RJ n
NL	UU	n	RJ n
NS (EX. NST)	UU	n	RJ n
NST	UU	n	RJ n
NT	UU	n	RJ n
NV	UU	n	RJ n
NW	UU	n	RJ n
NZ	UU	n	RJ n
OA	UU	n	(N) n
OB	UU	n	(N) n
OE	UU	n	(N) n
OI	UU	n	(N) n
OJ	UU	n	(N) n
OK	UU	n	(N) n
OL	UU	n	(N) n
OM	UU	n	(N) n
OO	UU	n	(N) n
OP	UU	n	(N) n
OR	UU	n	(N) n
OS	UU	n	(N) n

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Attachment B to WP/04

OT	UU	n	(N)	n
OY	UU	n	(N)	n
P	UU	zb	(N)	n
RC	UU	zb	RJ	n
RJ,RO	UU	zb	RJ	n
RK	UU	zb	RJ	n
RP	UU	zb	RJ	n
S	UU	zb	(N)	n
T	UU	zb	(N)	n
U (EX. UH UI UT UE UN)	(N)	n	(N)	n
UH,UE,UN	(N)	n	(N)	n
UI	(N)	n	(N)	n
UT	(N)	n	UA	un
VA	ZB	n	RJ	uh
VC	ZB	n	RJ	uh
VD	ZB	n	RJ	uh
VE	ZB	n	RJ	uh
VG	ZB	n	RJ	uh
VH	ZB	n	RJ	uh
VI	ZB	n	RJ	uh
VL	ZB	n	RJ	uh
VM	ZB	n	RJ	uh
VN	ZB	n	RJ	uh
VO	ZB	n	RJ	uh
VQ	ZB	n	RJ	uh
VR	ZB	n	RJ	uh
VT	ZB	n	RJ	uh
VV (EX. VVT)	ZB	n	RJ	uh
VVT	ZB	n	RJ	uh
VY	ZB	n	RJ	uh
WA	UU	zb	RJ	n
WB (EX. WBA WBS)	UU	zb	RJ	n
WBA WBS	UU	zb	RJ	n
WI	UU	zb	RJ	n
WM	UU	zb	RJ	n
WP	UU	zb	RJ	n
WR	UU	zb	RJ	n
WS	UU	zb	RJ	n
Y	UU	zb	RJ	n
Z (EX. ZG ZJ ZK ZM)	ZB	n	UH	rj
ZG	ZB	n	UH	rj
ZJ	ZB	n	UH	rj
ZK	ZB	n	UH	rj
ZM	ZB	ui	UI	uh

5.

A	1		2		3		4		5		6	
ORIGIN DESTINATION	AGGG		ANAU		AYPM		KSLC		NCRG		NFFN	
AG	(N)	n	YB		YB		YB	nf	NZ		YB	ks
AN	YB		(N)	n	YB		YB	nf	NZ		YB	ks
AY	YB		YB		(N)	n	YB	nf	NZ		YB	ks
B	YB		YB		YB		(N)	n	NZ		KS	yb
C	YB		YB		YB		(N)	n	NZ		KS	yb
D	YB		YB		YB		(N)	n	NZ		YB	ks
E	YB		YB		YB		(N)	n	NZ		YB	ks
F	YB		YB		YB		(N)	n	NZ		YB	ks
G	YB		YB		YB		(N)	n	NZ		YB	ks
H	YB		YB		YB		(N)	n	NZ		YB	ks
K	YB		YB		YB		(N)	n	NZ		KS	yb
L	YB		YB		YB		(N)	n	NZ		YB	ks
M	YB		YB		YB		(N)	n	NZ		KS	yb
NC	YB		YB		YB		NZ	yb	(N)	n	YB	ks
NF (EX. NFT)	YB		YB		YB		NF	yb	NZ		(N)	n
NFT	YB		YB		YB		NZ	yb	NZ		YB	ks
NG (EX. NGF)	YB		YB		YB		NF	yb	NZ		NGT	n
NGF	YB		YB		YB		NF	yb	NZ		NGF	n
NI	YB		YB		YB		NZ	yb	NZ		YB	ks
NL	YB		YB		YB		NF	yb	NZ		NW	n
NS (EX. NST)	YB		YB		YB		NZ	yb	NZ		YB	ks
NST	YB		YB		YB		NST	n	NZ		KS	yb
NT	YB		YB		YB		NZ	yb	NZ		YB	ks
NV	YB		YB		YB		YB	nf	NZ		YB	ks
NW	YB		YB		YB		NF	yb	NZ		NW	yb
NZ	YB		YB		YB		NZ	yb	NZ		YB	ks
OA	YB		YB		YB		(N)	n	NZ		YB	ks
OB	YB		YB		YB		(N)	n	NZ		YB	ks
OE	YB		YB		YB		(N)	n	NZ		YB	ks
OI	YB		YB		YB		(N)	n	NZ		YB	ks
OJ	YB		YB		YB		(N)	n	NZ		YB	ks
OK	YB		YB		YB		(N)	n	NZ		YB	ks
OL	YB		YB		YB		(N)	n	NZ		YB	ks
OM	YB		YB		YB		(N)	n	NZ		YB	ks
OO	YB		YB		YB		(N)	n	NZ		YB	ks
OP	YB		YB		YB		RJ	yb	NZ		YB	ks
OR	YB		YB		YB		(N)	n	NZ		YB	ks
OS	YB		YB		YB		(N)	n	NZ		YB	ks
OT	YB		YB		YB		(N)	n	NZ		YB	ks
OY	YB		YB		YB		(N)	n	NZ		YB	ks
P	YB		YB		YB		(N)	n	NZ		KS	yb
RC	YB		YB		YB		RJ	yb	NZ		YB	ks
RJ,RO	YB		YB		YB		RJ	yb	NZ		YB	ks
RK	YB		YB		YB		RJ	yb	NZ		YB	ks
RP	YB		YB		YB		RP	rj	NZ		YB	ks
S	YB		YB		YB		(N)	n	NZ		KS	yb
T	YB		YB		YB		(N)	n	NZ		KS	yb

[illegible]

7.

A	1		2		3		4		5		6	
ORIGIN DESTINATION	NFTF		NGFU		NGTT		NIUE		NSFA		NSTU	
AG	NZ		NF		NF		NZ		NZ		KS	
AN	NZ		NF		NF		NZ		NZ		KS	
AY	NZ		NF		NF		NZ		NZ		KS	
B	NZ		NF		NF		NZ		NZ		KS	
C	NZ		NF		NF		NZ		NZ		KS	
D	NZ		NF		NF		NZ		NZ		KS	
E	NZ		NF		NF		NZ		NZ		KS	
F	NZ		NF		NF		NZ		NZ		KS	
G	NZ		NF		NF		NZ		NZ		KS	
H	NZ		NF		NF		NZ		NZ		KS	
K	NZ		NF		NF		NZ		NZ		KS	
L	NZ		NF		NF		NZ		NZ		KS	
M	NZ		NF		NF		NZ		NZ		KS	
NC	NZ		NF		NF		NZ		NZ		KS	
NF (EX. NFT)	NZ		NF		NF		NZ		NZ		KS	
NFT	(N)	n	NF		NF		NZ		NZ		KS	
NG (EX. NGF)	NZ		NF		(N)	n	NZ		NZ		KS	
NGF	NZ		(N)	n	NF		NZ		NZ		KS	
NI	NZ		NF		NF		(N)	n	NZ		KS	
NL	NZ		NF		NF		NZ		NZ		KS	
NS (EX. NST)	NZ		NF		NF		NZ		(N)	n	KS	
NST	NZ		NF		NF		NZ		NZ		(N)	n
NT	NZ		NF		NF		NZ		NZ		KS	
NV	NZ		NF		NF		NZ		NZ		KS	
NW	NZ		NF		NF		NZ		NZ		KS	
NZ	NZ		NF		NF		NZ		NZ		KS	
OA	NZ		NF		NF		NZ		NZ		KS	
OB	NZ		NF		NF		NZ		NZ		KS	
OE	NZ		NF		NF		NZ		NZ		KS	
OI	NZ		NF		NF		NZ		NZ		KS	
OJ	NZ		NF		NF		NZ		NZ		KS	
OK	NZ		NF		NF		NZ		NZ		KS	
OL	NZ		NF		NF		NZ		NZ		KS	
OM	NZ		NF		NF		NZ		NZ		KS	
OO	NZ		NF		NF		NZ		NZ		KS	
OP	NZ		NF		NF		NZ		NZ		KS	
OR	NZ		NF		NF		NZ		NZ		KS	
OS	NZ		NF		NF		NZ		NZ		KS	
OT	NZ		NF		NF		NZ		NZ		KS	
OY	NZ		NF		NF		NZ		NZ		KS	
P	NZ		NF		NF		NZ		NZ		KS	
RC	NZ		NF		NF		NZ		NZ		KS	
RJ,RO	NZ		NF		NF		NZ		NZ		KS	
RK	NZ		NF		NF		NZ		NZ		KS	
RP	NZ		NF		NF		NZ		NZ		KS	
S	NZ		NF		NF		NZ		NZ		KS	
T	NZ		NF		NF		NZ		NZ		KS	

[illegible]

A	1		2		3		4		5		6	
ORIGIN DESTINATION	NTAA		NVVV		NWWW		NZCH		OPKC		PKMJ	
AG	NZ		YB		NF		YB	ks	VA	zb	KS	
AN	NZ		YB		NF		YB	ks	VA	zb	KS	
AY	NZ		YB		NF		YB	ks	VA	zb	KS	
B	NZ		YB		NF		KS	yb	OK	oi	KS	
C	NZ		YB		NF		KS	yb	OK	oi	KS	
D	NZ		YB		NF		YB	ks	OK	oi	KS	
E	NZ		YB		NF		YB	ks	OK	oi	KS	
F	NZ		YB		NF		YB	ks	OK	oi	KS	
G	NZ		YB		NF		YB	ks	OK	oi	KS	
H	NZ		YB		NF		YB	ks	OK	oi	KS	
K	NZ		YB		NF		KS	yb	OK	oi	KS	
L	NZ		YB		NF		YB	ks	OK	oi	KS	
M	NZ		YB		NF		KS	yb	OK	zb	KS	
NC	NZ		YB		NF		NC	n	VA	zb	KS	
NF (EX. NFT)	NZ		YB		NF		YB	ks	VA	zb	KS	
NFT	NZ		YB		NF		NFT	n	VA	zb	KS	
NG (EX. NGF)	NZ		YB		NF		YB	ks	VA	zb	KS	
NGF	NZ		YB		NF		YB	ks	VA	zb	KS	
NI	NZ		YB		NF		NI	n	VA	zb	KS	
NL	NZ		YB		NL		YB	ks	VA	zb	KS	
NS (EX. NST)	NZ		YB		NF		NS	n	VA	zb	KS	
NST	NZ		YB		NF		KS	yb	VA	zb	KS	
NT	(N)	n	YB		NF	nt	NT	n	VA	zb	KS	
NV	NZ		(N)	n	NF		YB	ks	VA	zb	KS	
NW	NZ	nw	YB		(N)	n	YB	ks	VA	zb	KS	
NZ	NZ		YB		NF		(N)	n	VA	zb	KS	
OA	NZ		YB		NF		YB	ks	OA	oi	KS	
OB	NZ		YB		NF		YB	ks	OK	oi	KS	
OE	NZ		YB		NF		YB	ks	OK	oi	KS	
OI	NZ		YB		NF		YB	ks	OI	ok	KS	
OJ	NZ		YB		NF		YB	ks	OK	oi	KS	
OK	NZ		YB		NF		YB	ks	OK	oi	KS	
OL	NZ		YB		NF		YB	ks	OK	oi	KS	
OM	NZ		YB		NF		YB	ks	OK	oi	KS	
OO	NZ		YB		NF		YB	ks	OK	oi	KS	
OP	NZ		YB		NF		YB	ks	(N)	n	KS	
OR	NZ		YB		NF		YB	ks	OI	ok	KS	
OS	NZ		YB		NF		YB	ks	OI	ok	KS	
OT	NZ		YB		NF		YB	ks	OK	oi	KS	
OY	NZ		YB		NF		YB	ks	OK	oi	KS	
P	NZ		YB		NF		KS	yb	VA	zb	(N)	n
RC	NZ		YB		NF		YB	ks	VA	zb	KS	
RJ,RO	NZ		YB		NF		YB	ks	VA	zb	KS	
RK	NZ		YB		NF		YB	ks	VA	zb	KS	
RP	NZ		YB		NF		YB	ks	VA	zb	KS	
S	NZ		YB		NF		KS	yb	OK	oi	KS	
T	NZ		YB		NF		KS	yb	OK	oi	KS	

[illegible]

A	1		2		3		4		5		6	
ORIGIN DESTINATION	PTKK		PTPN		PTRO		PTSA		PTYA		RCTP	
AG	KS		KS		KS		KS		KS		RP	vh
AN	KS		KS		KS		KS		KS		RP	vh
AY	KS		KS		KS		KS		KS		RP	vh
B	KS		KS		KS		KS		KS		VH	rp
C	KS		KS		KS		KS		KS		VH	rp
D	KS		KS		KS		KS		KS		RP	vh
E	KS		KS		KS		KS		KS		VH	rp
F	KS		KS		KS		KS		KS		RP	vh
G	KS		KS		KS		KS		KS		RP	vh
H	KS		KS		KS		KS		KS		RP	vh
K	KS		KS		KS		KS		KS		VH	rp
L	KS		KS		KS		KS		KS		VH	rp
M	KS		KS		KS		KS		KS		VH	rp
NC	KS		KS		KS		KS		KS		RP	vh
NF (EX. NFT)	KS		KS		KS		KS		KS		RP	vh
NFT	KS		KS		KS		KS		KS		RP	vh
NG (EX. NGF)	KS		KS		KS		KS		KS		RP	vh
NGF	KS		KS		KS		KS		KS		RP	vh
NI	KS		KS		KS		KS		KS		RP	vh
NL	KS		KS		KS		KS		KS		RP	vh
NS (EX. NST)	KS		KS		KS		KS		KS		RP	vh
NST	KS		KS		KS		KS		KS		RP	vh
NT	KS		KS		KS		KS		KS		RP	vh
NV	KS		KS		KS		KS		KS		RP	vh
NW	KS		KS		KS		KS		KS		RP	vh
NZ	KS		KS		KS		KS		KS		RP	vh
OA	KS		KS		KS		KS		KS		RP	vh
OB	KS		KS		KS		KS		KS		RP	vh
OE	KS		KS		KS		KS		KS		RP	vh
OI	KS		KS		KS		KS		KS		RP	vh
OJ	KS		KS		KS		KS		KS		RP	vh
OK	KS		KS		KS		KS		KS		RP	vh
OL	KS		KS		KS		KS		KS		RP	vh
OM	KS		KS		KS		KS		KS		RP	vh
OO	KS		KS		KS		KS		KS		RP	vh
OP	KS		KS		KS		KS		KS		RP	vh
OR	KS		KS		KS		KS		KS		RP	vh
OS	KS		KS		KS		KS		KS		RP	vh
OT	KS		KS		KS		KS		KS		RP	vh
OY	KS		KS		KS		KS		KS		RP	vh
P	(N)		(N)		(N)		(N)		(N)		VH	rp
RC	KS		KS		KS		KS		KS		(N)	n
RJ,RO	KS		KS		KS		KS		KS		RJ	vh
RK	KS		KS		KS		KS		KS		RJ	vh
RP	KS		KS		KS		KS		KS		RP	vh
S	KS		KS		KS		KS		KS		VH	rp
T	KS		KS		KS		KS		KS		VH	rp

[illegible]

A	1		2		3		4		5		6	
ORIGIN DESTINATION	RJJJ		RKSS		RPLL		UH HH		UUUU		VABB	
AG	WS	vh	RJ		WS	vh	UU	zb	RJ	n	VT	vc
AN	WS	vh	RJ		WS	vh	UU	zb	RJ	n	VT	vc
AY	WS	vh	RJ		WS	vh	UU	zb	RJ	n	VT	vc
B	KS	ws	RJ		VH	ws	UU	zb	(N)	(N)	VT	vc
C	KS	ws	RJ		KS	vh	UU	zb	(N)	(N)	VT	vc
D	WS	vh	RJ		WS	vh	UU	zb	(N)	(N)	HK	vt
E	WS	vh	RJ		VH	ws	UU	n	(N)	(N)	VT	vc
F	WS	vh	RJ		WS	vh	UU	n	(N)	(N)	HK	vt
G	WS	vh	RJ		WS	vh	UU	n	(N)	(N)	HK	vt
H	WS	vh	RJ		WS	vh	UU	n	(N)	(N)	HK	vt
K	KS	ws	RJ	zb	KS	vh	UU	zb	RJ	n	VT	vc
L	WS	vh	RJ		VH	ws	UU	n	(N)	(N)	VT	vc
M	KS	ws	RJ		KS	vh	UU	zb	RJ	n	VT	vc
NC	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NF (EX. NFT)	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NFT	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NG (EX. NGF)	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NGF	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NI	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NL	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NS (EX. NST)	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NST	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NT	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NV	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NW	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
NZ	KS	ws	RJ		WS	vh	UU	n	RJ	n	VT	vc
OA	WS	vh	RJ		WS	vh	UU	n	(N)	n	OP	vn
OB	WS	vh	RJ		WS	vh	UU	n	(N)	n	OO	op
OE	WS	vh	RJ		WS	vh	UU	n	(N)	n	OO	op
OI	WS	vh	RJ		WS	vh	UU	n	(N)	n	OP	oo
OJ	WS	vh	RJ		WS	vh	UU	n	(N)	n	OO	op
OK	WS	vh	RJ		WS	vh	UU	n	(N)	n	OO	op
OL	WS	vh	RJ		WS	vh	UU	n	(N)	n	OO	op
OM	WS	vh	RJ		WS	vh	UU	n	(N)	n	OO	op
OO	WS	vh	RJ		WS	vh	UU	n	(N)	n	OO	op
OP	WS	vh	RJ		WS	vh	UU	n	(N)	n	OP	oo
OR	WS	vh	RJ		WS	vh	UU	n	(N)	n	OO	op
OS	WS	vh	RJ		WS	vh	UU	n	(N)	n	OO	op
OT	WS	vh	RJ		WS	vh	UU	n	(N)	n	OO	op
OY	WS	vh	RJ		WS	vh	UU	n	(N)	n	OO	op
P	KS	ws	RJ		KS	vh	UU	zb	(N)	n	VT	vc
RC	RC	vh	RJ		RC	vh	UU	zb	RJ	n	VT	vc
RJ,RO	(N)	n	RJ	zb	VH	rc	UU	zb	RJ	n	VT	vc
RK	RK	zb	(N)	n	VH	rc	UU	zb	RJ	n	VT	vc
RP	WS	vh	RJ		(N)	n	UU	zb	RJ	n	VT	vc
S	KS	ws	RJ		KS	vh	UU	zb	(N)	n	VT	vc
T	KS	ws	RJ		KS	vh	UU	zb	(N)	n	VT	vc

[illegible]

A	1		2		3		4		5		6	
ORIGIN DESTINATION	VCCC		VDPP		VECC		VGHS		VHHH		VIDD	
AG	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
AN	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
AY	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
B	WS	va	VT		VA	vg	VT	va	RJ	vt	VA	n
C	WS	va	VT		VA	vg	VT	va	RJ	rp	VA	n
D	WS	va	VT		VA	n	VT	va	VT	vvt	VA	n
E	WS	va	VT		VA	n	VT	va	VT	rj	VA	n
F	WS	va	VT		VA	vo	VT	va	VT	rp	VA	ve
G	WS	va	VT		VA	n	VT	va	VT	vvt	VA	n
H	WS	va	VT		VA	n	VT	va	VT	vvt	VA	n
K	WS	va	VT		VA	vg	VT	va	RJ	rp	VA	n
L	WS	va	VT		VA	n	VT	va	VT	rj	VA	n
M	WS	va	VT		VA	vg	VT	va	RJ	rp	VA	n
NC	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NF (EX. NFT)	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NFT	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NG (EX. NGF)	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NGF	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NI	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NL	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NS (EX. NST)	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NST	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NT	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NV	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NW	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
NZ	WS	va	VT		VA	vg	VT	va	VT	rp	VA	n
OA	VA	ws	VT		VA	n	VT	va	ZB	vt	VA	n
OB	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
OE	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
OI	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
OJ	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
OK	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
OL	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
OM	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
OO	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
OP	VA	ws	VT		VA	n	VT	va	ZB	vt	VA	n
OR	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
OS	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
OT	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
OY	WS	va	VT		VA	n	VT	va	VT	rp	VA	n
P	WS	va	VT		VA	vg	VT	va	RJ	rp	VA	n
RC	WS	va	VT		VA	vg	VT	va	RC	rp	VA	n
RJ,RO	WS	va	VT		VA	vg	VT	va	RJ	rc	VA	n
RK	WS	va	VT		VA	vg	VT	va	RJ	zb	VA	n
RP	WS	va	VT		VA	vg	VT	va	RP	rc	VA	n
S	WS	va	VT		VA	vg	VT	va	RJ	rp	VA	n
T	WS	va	VT		VA	vg	VT	va	RJ	rp	VA	n

[illegible]

A	1		2		3		4		5		6	
ORIGIN DESTINATION	VLVT		VMMC		VNKT		VOMM		VQPR		VRMM	
AG	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
AN	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
AY	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
B	VT	vv	VH	zg	ZB	va	WM	va	VA		VC	
C	VT	vv	VH	zg	ZB	va	WM	va	VA		VC	
D	VT	vv	VH	zg	ZB	va	VA	wm	VA		VC	
E	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
F	VT	vv	VH	zg	ZB	va	VA	wm	VA		VC	
G	VT	vv	VH	zg	ZB	va	VA	wm	VA		VC	
H	VT	vv	VH	zg	ZB	va	VA	wm	VA		VC	
K	VT	vv	VH	zg	ZB	va	WM	va	VA		VC	
L	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
M	VT	vv	VH	zg	ZB	va	WM	va	VA		VC	
NC	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NF (EX. NFT)	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NFT	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NG (EX. NGF)	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NGF	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NI	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NL	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NS (EX. NST)	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NST	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NT	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NV	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NW	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
NZ	VT	vv	VH	zg	VA	zb	WM	va	VA		VC	
OA	VT	vv	VH	zg	VA	zb	VA	n	VA		VC	
OB	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
OE	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
OI	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
OJ	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
OK	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
OL	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
OM	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
OO	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
OP	VT	vv	VH	zg	ZB	va	VA	wm	VA		VC	
OR	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
OS	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
OT	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
OY	VT	vv	VH	zg	VA	zb	VA	wm	VA		VC	
P	VT	vv	VH	zg	ZB	va	WM	va	VA		VC	
RC	VT	vv	VH	zg	ZB	va	WM	va	VA		VC	
RJ,RO	VT	vv	VH	zg	ZB	va	WM	va	VA		VC	
RK	VT	vv	VH	zg	ZB	va	WM	va	VA		VC	
RP	VT	vv	VH	zg	ZB	va	WM	va	VA		VC	
S	VT	vv	VH	zg	ZB	va	WM	va	VA		VC	
T	VT	vv	VH	zg	ZB	va	WM	va	VA		VC	

[illegible]

A	1		2		3		4		5		6	
ORIGIN DESTINATION	VTBB		VVTs		VVVV		VYYY		WBKK		WBSB	
AG	WS	wm	VT	vh	VVT		VT		WM		WS	wm
AN	WS	wm	VT	vh	VVT		VT		WM		WS	wm
AY	WS	wm	VT	vh	VVT		VT		WM		WS	wm
B	VH	ws	VH	vt	VVT		VT		WM		WS	wm
C	VH	ws	VH	vt	VVT		VT		WM		WS	wm
D	WS	va	VT	vh	VVT		VT		WM		WS	wm
E	LI	ws	VH	vt	VVT		VT		WM		WS	wm
F	WS	va	VT	vh	VVT		VT		WM		WS	wm
G	WS	va	VT	vh	VVT		VT		WM		WS	wm
H	WS	va	VT	vh	VVT		VT		WM		WS	wm
K	VH	ws	VH	vt	VVT		VT		WM		WS	wm
L	LI	ws	VH	vt	VVT		VT		WM		WS	wm
M	VH	ws	VH	vt	VVT		VT		WM		WS	wm
NC	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NF (EX. NFT)	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NFT	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NG (EX. NGF)	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NGF	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NI	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NL	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NS (EX. NST)	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NST	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NT	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NV	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NW	WS	wm	VT	vh	VVT		VT		WM		WS	wm
NZ	WS	wm	VT	vh	VVT		VT		WM		WS	wm
OA	VA	ws	VT	vh	VVT		VT		WM		WS	wm
OB	WS	va	VT	vh	VVT		VT		WM		WS	wm
OE	WS	wm	VT	vh	VVT		VT		WM		WS	wm
OI	WS	wm	VT	vh	VVT		VT		WM		WS	wm
OJ	WS	wm	VT	vh	VVT		VT		WM		WS	wm
OK	WS	wm	VT	vh	VVT		VT		WM		WS	wm
OL	WS	wm	VT	vh	VVT		VT		WM		WS	wm
OM	WS	wm	VT	vh	VVT		VT		WM		WS	wm
OO	WS	wm	VT	vh	VVT		VT		WM		WS	wm
OP	VA	ws	VT	vh	VVT		VT		WM		WS	wm
OR	WS	wm	VT	vh	VVT		VT		WM		WS	wm
OS	WS	wm	VT	vh	VVT		VT		WM		WS	wm
OT	WS	wm	VT	vh	VVT		VT		WM		WS	wm
OY	WS	wm	VT	vh	VVT		VT		WM		WS	wm
P	VH	ws	VH	vt	VVT		VT		WM		WS	wm
RC	VH	ws	VH	vt	VVT		VT		WM		WS	wm
RJ,RO	VH	ws	VH	vt	VVT		VT		WM		WS	wm
RK	VH	ws	VH	vt	VVT		VT		WM		WS	wm
RP	VH	ws	RP	vh	VVT		VT		WM		WS	wm
S	VH	ws	VH	vt	VVT		VT		WM		WS	wm
T	VH	ws	VH	vt	VVT		VT		WM		WS	wm

[illegible]

A	1		2		3		4		5		6	
ORIGIN DESTINATION	WIII		WMKK		WPDL		WSSS		YBBB		ZBBB	
AG	YB	ws	WS	vt	Y		YB	wi	AG	n	RJ	zg
AN	YB	ws	WS	vt	Y		YB	wi	AN	n	RJ	zg
AY	YB	ws	WS	vt	Y		YB	wi	AY	n	RJ	zg
B	YB	ws	WS	vt	Y		RJ	yb	KS	nf	RJ	zg
C	YB	ws	WS	vt	Y		RJ	yb	KS	nf	RJ	zg
D	YB	ws	WS	vt	Y		YB	vt	FA	ws	RJ	op
E	WS	yb	WS	vt	Y		EG	vt	WS	wi	RJ	zg
F	YB	ws	WS	vt	Y		YB	vt	FA	ws	RJ	op
G	YB	ws	WS	vt	Y		YB	vt	FA	ws	RJ	op
H	YB	ws	WS	vt	Y		YB	vt	FA	ws	RJ	op
K	YB	ws	WS	vt	Y		RJ	yb	KS	nf	RJ	zg
L	WS	yb	WS	vt	Y		EG	vt	WS	wi	RJ	zg
M	YB	ws	WS	vt	Y		RJ	yb	KS	nf	RJ	zg
NC	YB	ws	WS	vt	Y		YB	wi	NZ	ks	RJ	zg
NF (EX. NFT)	YB	ws	WS	vt	Y		YB	wi	NF	nz	RJ	zg
NFT	YB	ws	WS	vt	Y		YB	wi	NZ	ks	RJ	zg
NG (EX. NGF)	YB	ws	WS	vt	Y		YB	wi	NF	nz	RJ	zg
NGF	YB	ws	WS	vt	Y		YB	wi	NF	nz	RJ	zg
NI	YB	ws	WS	vt	Y		YB	wi	NZ	ks	RJ	zg
NL	YB	ws	WS	vt	Y		YB	wi	NF	nz	RJ	zg
NS (EX. NST)	YB	ws	WS	vt	Y		YB	wi	NZ	ks	RJ	zg
NST	YB	ws	WS	vt	Y		YB	wi	KS	nf	RJ	zg
NT	YB	ws	WS	vt	Y		YB	wi	NZ	ks	RJ	zg
NV	YB	ws	WS	vt	Y		YB	wi	NV	n	RJ	zg
NW	YB	ws	WS	vt	Y		YB	wi	NF	nz	RJ	zg
NZ	YB	ws	WS	vt	Y		YB	wi	NZ	ks	RJ	zg
OA	WS	yb	VO	vt	Y		VC	vt	WS	wi	OP	vn
OB	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
OE	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
OI	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
OJ	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
OK	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
OL	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
OM	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
OO	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
OP	WS	yb	VT	ws	Y		VT	oo	WS	wi	OP	zg
OR	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
OS	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
OT	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
OY	WS	yb	WS	vt	Y		OB	vt	WS	wi	OP	zg
P	YB	ws	WS	vt	Y		RJ	yb	KS	nf	RJ	zg
RC	WS	yb	WS	vt	Y		RJ	vt	WS	wi	RJ	zg
RJ,RO	WS	yb	WS	vt	Y		RJ	vt	WS	wi	RJ	zg
RK	WS	yb	WS	vt	Y		RJ	vt	WS	wi	RK	rj
RP	WS	yb	WS	vt	Y		RP	vt	WS	wi	VH	zg
S	YB	ws	WS	vt	Y		RJ	yb	KS	nf	RJ	zg
T	WS	yb	WS	vt	Y		RJ	yb	KS	nf	RJ	zg

[illegible]

A	1		2		3		4		5		6	
ORIGIN DESTINATION	ZGGG		ZJHK		ZKKK		ZMUB					
AG	VH	zb	VH	zg	ZB	n	ZB					
AN	VH	zb	VH	zg	ZB	n	ZB					
AY	VH	zb	VH	zg	ZB	n	ZB					
B	ZB	vh	ZG	vh	ZB	n	ZB					
C	ZB	vh	ZG	vh	ZB	n	ZB					
D	ZB	vh	ZG	vh	ZB	n	ZB					
E	VH	zb	VH	zg	ZB	n	ZB					
F	ZB	vh	VH	zg	ZB	n	ZB					
G	ZB	vh	ZG	vh	ZB	n	ZB					
H	ZB	vh	ZG	vh	ZB	n	ZB					
K	ZB	vh	ZG	vh	RK	zb	ZB					
L	VH	zb	VH	zg	ZB	n	ZB					
M	ZB	vh	ZG	vh	ZB	n	ZB					
NC	VH	zb	VH	zg	ZB	n	ZB					
NF (EX. NFT)	VH	zb	VH	zg	ZB	n	ZB					
NFT	VH	zb	VH	zg	ZB	n	ZB					
NG (EX. NGF)	VH	zb	VH	zg	ZB	n	ZB					
NGF	VH	zb	VH	zg	ZB	n	ZB					
NI	VH	zb	VH	zg	ZB	n	ZB					
NL	VH	zb	VH	zg	ZB	n	ZB					
NS (EX. NST)	VH	zb	VH	zg	ZB	n	ZB					
NST	VH	zb	VH	zg	ZB	n	ZB					
NT	VH	zb	VH	zg	ZB	n	ZB					
NV	VH	zb	VH	zg	ZB	n	ZB					
NW	VH	zb	VH	zg	ZB	n	ZB					
NZ	VH	zb	VH	zg	ZB	n	ZB					
OA	ZB	vh	ZG	vh	ZB	n	ZB					
OB	ZB	vh	ZG	vh	ZB	n	ZB					
OE	ZB	vh	ZG	vh	ZB	n	ZB					
OI	ZB	vh	ZG	vh	ZB	n	ZB					
OJ	ZB	vh	ZG	vh	ZB	n	ZB					
OK	ZB	vh	ZG	vh	ZB	n	ZB					
OL	ZB	vh	ZG	vh	ZB	n	ZB					
OM	ZB	vh	ZG	vh	ZB	n	ZB					
OO	ZB	vh	ZG	vh	ZB	n	ZB					
OP	ZB	vh	ZG	vh	ZB	n	ZB					
OR	ZB	vh	ZG	vh	ZB	n	ZB					
OS	ZB	vh	ZG	vh	ZB	n	ZB					
OT	ZB	vh	ZG	vh	ZB	n	ZB					
OY	ZB	vh	ZG	vh	ZB	n	ZB					
P	ZB	vh	ZG	vh	ZB	n	ZB					
RC	ZB	vh	VH	zg	ZB	n	ZB					
RJ,RO	ZB	vh	ZG	vh	RK	zb	ZB					
RK	ZB	vh	ZG	vh	RK	zb	ZB					
RP	VH	zb	VH	zg	ZB	n	ZB					
S	ZB	vh	ZG	vh	ZB	n	ZB					
T	ZB	n	ZG	vh	ZB	n	ZB					

[illegible]

25.

A	1		2		3		4		5		6	
ORIGIN DESTINATION	ZGGG		ZJHK		ZKKK		ZMUB					