

添付資料2 アンテナ建設許可文書

アンテナ建設許可文書



GOVERNMENT OF TUVALU
**MINISTRY OF COMMUNICATION, TRANSPORT &
TOURISM**

VAIAKU, FUNAFUTI, TUVALU

Phone: (688) 20052 or 20055 (Ext.2149) Fax: (688) 20722

Email: tap@tuvalu.tv or falefou_t@yahoo.co.uk

Our Ref. 50/01/00

27 May 2008

Melali Taape
Director
Tuvalu Media Department
Office of the Prime Minister
Vaiaku, FUNAFUTI

Dear Mrs Taape,

Subject: Request for approval of TMD AM Project Antenna

I refer to your letter of request dated 15 May 2008 on the above subject matter.

After due consideration of your request in accordance with the standard civil aviation requirement for runway aerodrome, I am pleased to advise that you may erect a 45 meter height AM Radio Antenna at the ocean-side of the runway towards the northern end. However, you are advised that the antenna shall not be constructed within 200 meters from the edge of the tar-sealed part of the runway. In other words, the new antenna shall be erected at least 200 meters away from the edge of the tar-sealed part of the runway.

I wish to make it clear that compliance with the given proximity requirement of our runway aerodrome is critically important for the safety of incoming and outgoing aircraft.

Yours sincerely,

Tapugao Falefou
Permanent Secretary of Communication, Transport & Tourism



添付資料 3 土地借用手続き

土地借用手続き（アンテナ設置第二候補地）



TUVALU GOVERNMENT
MINISTRY OF NATURAL RESOURCES

Department of Lands & Survey

PRIVATE MAIL BAG, VAIAKU, FUNAFUTI, TUVALU

Phone: (688) 20170 Fax: (688) 20167

e-mail: fmalologa@gmail.com

26 May 2008

To Whom It May Concern

Re: Alternative site for Tuvalu Government Antenna

This is to confirm that should the first proposed site for the AM antenna (east of runway, and north of playground) is not available for above development due to Civil Aviation regulations, the second and alternate option is to erect it at the northern- end of the road where the rubbish tip is.

The area is regarded locally as a wasteland used mainly for the purpose of dumping solid waste. In that regard, the area itself will not attract any significant economic development other than serving the purpose of a rubbish tip for public.

The proposed development to develop a leased land by Government to cater for the AM antenna and transmitter hut on site will enable landowners receive some financial benefits through an annual leased payments similar to other Government leases. If this is an option, the process will be as follows;

- Government with TMC will approach landowners to discuss the proposed development
- Government on behalf of TMC will enter into negotiations of a Leased Agreements which is normally drafted similar to all existing Leased Agreements.
- A survey will be carried out upon the approval of the landowners to terms and conditions of the Leased Agreements to demarcate the limits and boundaries of the project site.
- A Leased Agreement will be signed by both parties (Government & Landowners).
- TMC will start project on site (2 – 3 weeks process).

I hope above information will help to clarify the processes and arrangements involved should this alternative option is taken, if first option is not successful.

Please, feel free to contact me if you need anything related to this issue.

Sincerely,

A handwritten signature in black ink, appearing to read 'Faatasi Malologa'.

Faatasi Malologa
Director

添付資料4 予算措置に関する文書



TUVALU GOVERNMENT
OFFICE OF THE PRIME MINISTER

VAIAKU, FUNAFUTI, TUVALU
Phone: (688) 20102 Fax: (688) 20113
Email: solofau@tuvalu.tv

10th June, 2008.

Mr. Nariaki Mikuni
Leader
Preliminary Study Team
Japan International Cooperation Agency
Private Mail Bag
SUVA
Fiji.

Dear Mr. Mikuni,

Subject: **Financial allocation for TMD AM Radio Operation.**

Thank you very much for your positive consideration together with your team on our urgent and priority project for Reestablishment of the AM Radio Broadcasting Network. Tuvalu Media Department is now working to meet all the necessary documentations that were raised and agreed in the Minutes of Discussion signed on the 22nd May, 2008.

Concerning the issue of 'Request of Finance', which was highlighted at item 3 on Annex 5 in the said Minutes, I wish to remind you that the Government of Tuvalu will secure the necessary financial allocation for maintenance and proper operation of the AM Radio after project is implemented.

Thank you again for your consideration of our request. I sincerely wish that JICA will send a Basic Design Study Team within a few months for its early implementation.

Yours sincerely,


Solofa Uota
Secretary to Government [Ag].

添付資料5 ツバル国及び周辺国の ITU 登録状況

ツバル国及び周辺国の ITU 登録状況

ASSIGNED FREQUENCY	PLACE	COUNTRY	GEOGRAPHIC COORDINATES		CARRIER POWER	ANTENNA HEIGHT(m)	OPERATING HOURS
			LATITUDE	LONGITUDE			
531	ADELAIDE SA	AUS	34 50 0 S	138 34 0 E	0.50119Kw	37	800-1400
531	DALWALLINU WA	AUS	30 17 0 S	116 36 0 E	10Kw	213	2100-1600
531	INNISFAIL QLD	AUS	17 32 0 S	146 3 0 E	5.01187Kw		1900-1400
531	KEMPSEY NSW	AUS	31 6 0 S	152 50 0 E	5.01187Kw		1900-1400
531	WARRAGUL VIC	AUS	38 6 0 S	145 55 0 E	5.01187Kw		1900-1400
531	ALEXANDRA	NZL	45 12 0 S	169 25 0 E	1.99526Kw	107	0-2400
540	LONGREACH QLD	AUS	23 22 0 S	144 13 0 E	10Kw	198	1900-1400
540	SCOTTSDALE TAS	AUS	41 6 0 S	147 32 0 E	1.99526Kw		1900-1400
540	BANDUNG	INS	6 57 0 S	107 34 0 E	5.01187Kw	139	1900-1400
549	CUMNOCK NSW	AUS	32 46 0 S	148 42 0 E	50.1187Kw	198	2200-1700
549	CHRISTCHURCH	NZL	43 42 0 S	172 39 0 E	1.99526Kw	137	0-2400
549	WAIAPAKAURI	NZL	35 2 0 S	173 15 0 E	1.58489Kw	137	-
558	BURNIE TAS	AUS	41 2 0 S	145 52 0 E	1.99526Kw	64	1900-1400
558	GYMPIE QLD	AUS	26 13 0 S	152 41 0 E	5.01187Kw		500-2400
558	WAGIN WA	AUS	33 20 0 S	117 5 0 E	50.1187Kw	205	2100-1600
558	NAULU REWA	FJI	18 4 0 S	178 32 0 E	10Kw	60	1700-1200
558	INVERCARGILL	NZL	46 19 0 S	168 37 0 E	5.01187Kw	98	0-2400
567	BROKEN HILL NSW	AUS	32 3 0 S	141 26 0 E	0.50119Kw	61	1900-1400
567	JULIA CK QLD	AUS	20 39 0 S	141 49 0 E	10Kw		1900-1400
567	MT NEWMAN WA	AUS	23 19 0 S	119 45 0 E	0.1Kw	30	2100-1600
567	WELLINGTON	NZL	41 6 0 S	174 51 0 E	100Kw	218	0-2400
576	SYDNEY NSW	AUS	33 56 0 S	150 53 0 E	50.1187Kw	226	2000-1500
585	SURABAYA	INS	7 14 0 S	112 43 0 E	100Kw	256	2200-1700
585	RUATORIA	NZL	37 53 0 S	178 19 0 E	10Kw	44	0-2400
585	PT MORESBY	PNG	6 26 0 S	147 12 0 E	1.99526Kw	80	1900-1400
594	HORSHAM VIC	AUS	36 38 0 S	142 15 0 E	50.1187Kw	201	1900-1400
594	NIUE	NZL	19 2 0 S	169 55 0 E	0.50119Kw	107	0-2400
603	HOBART TAS	AUS	42 55 0 S	147 30 0 E	10Kw	201	2000-1500
603	PTHEDLAND WA	AUS	20 24 0 S	118 40 0 E	1.99526Kw	41	2100-1600
612	BRISBANE QLD	AUS	27 19 0 S	153 2 0 E	50.1187Kw	198	1900-1400
612	NORTHAM WA	AUS	31 39 0 S	116 40 0 E	0.19953Kw	86	2100-1600
612	CHATHAM IS	NZL	44 5 0 S	176 38 0 W	1Kw	123	0-2400
612	NEW PLYMOUTH	NZL	39 2 0 S	174 8 0 E	1Kw	123	0-2400
612	TE ANAU	NZL	45 30 0 S	167 43 0 E	0.39811Kw	55	0-2400
621	MELBOURNE VIC	AUS	37 43 0 S	144 47 0 E	50.1187Kw	216	2000-1500
621	WHANGAREI	NZL	35 41 0 S	174 19 0 E	1.99526Kw	121	0-2400
621	FUNAFUTI	TUV	8 31 0 S	179 13 0 E	1.99526Kw	31	1800-1000
630	ALBANY WA	AUS	35 1 0 S	117 49 0 E	0.39811Kw	37	2100-1600
630	QUEENSTOWN TAS	AUS	42 3 0 S	145 31 0 E	0.39811Kw	53	1900-1400
630	TOWNSVILLE QLD	AUS	19 31 0 S	147 20 0 E	50.1187Kw	198	1900-1400
630	BLACK ROCK	NZL	21 12 0 S	159 50 0 W	10Kw	40	1600-900
630	OPAPA	NZL	39 48 0 S	176 40 0 E	19.9526Kw		0-2400
630	UJUNG PANDANG	INS	5 9 0 S	119 28 0 E	100Kw	234	2200-1700
639	CRYSTAL BRK SA	AUS	33 21 0 S	138 15 0 E	10Kw	183	1900-1400
639	MOSSMAN QLD	AUS	16 25 0 S	145 23 0 E	1Kw	61	1900-1400
639	DRASA	FJI	17 35 0 S	177 31 0 E	10Kw	90	1700-1200
639	ALEXANDRA	NZL	45 10 0 S	169 24 0 E	1.99526Kw	107	0-2400
648	KALGOOLIE WA	AUS	30 47 0 S	121 24 0 E	1.99526Kw	123	2100-1600
648	MANILLA NSW	AUS	30 47 0 S	150 45 0 E	10Kw	172	1900-1400
648	GREYMOOUTH	NZL	42 34 0 S	171 9 0 E	1Kw	116	0-2400
657	BYROCK NSW	AUS	30 39 0 S	146 26 0 E	10Kw		1900-1400
657	DARWIN NT	AUS	12 25 0 S	130 51 0 E	1.99526Kw	40	1900-1400
657	WELLINGTON	NZL	41 6 0 S	174 51 0 E	60.256Kw	218	0-2400
666							
675	BROOME WA	AUS	17 58 0 S	122 14 0 E	0.05012Kw	34	2100-1600
675	COROWA NSW	AUS	35 57 0 S	146 25 0 E	10Kw		1900-1400
675	KATHERINE NT	AUS	14 29 0 S	132 15 0 E	0.05012Kw	21	1900-1400
675	CHRISTCHURCH	NZL	43 42 0 S	172 39 0 E	1.99526Kw	90	0-2400
675	LAE	PNG	6 44 0 S	147 0 0 E	1.99526Kw	80	1900-1400
675	WEWAK	PNG	3 35 0 S	143 38 0 E	1.99526Kw	100	1900-1400
684	BUSSELTON WA	AUS	33 39 0 S	115 13 0 E	3.98107Kw	183	2100-1600
684	SMITHTOWN NSW	AUS	31 0 0 S	152 57 0 E	10Kw	168	1900-1400
684	TENNANT CK NT	AUS	19 39 0 S	134 11 0 E	1Kw	51	1900-1400
684	LABASA	FJI	16 25 0 S	179 22 0 E	10Kw	30	1700-1200
693	BRISBANE QLD	AUS	27 28 0 S	153 7 0 E	5.01187Kw		0-2400
693	STREAKY BAY SA	AUS	32 45 0 S	134 11 0 E	1.99526Kw		1900-2100
693	PALEMBANG	INS	2 59 0 S	104 45 0 E	50.1187Kw	110	2200-1700

ASSIGNED FREQUENCY	PLACE	COUNTRY	GEOGRAPHIC COORDINATES		CARRIER POWER	ANTENNA HEIGHT(m)	OPERATING HOURS
			LATITUDE	LONGITUDE			
702	SYDNEY NSW	AUS	33 57 0 S	150 53 0 E	50.1187Kw	226	1900-1400
711	KELSO TAS	AUS	41 6 0 S	146 48 0 E	10Kw		1900-1400
711	S GEORGE QLD	AUS	28 0 0 S	148 41 0 E	10Kw		1900-1400
711	NAULU REWA	FJI	18 4 0 S	178 32 0 E	10Kw	45	1700-1200
711	TITAHIB	NZL	41 6 0 S	174 51 0 E	5.01187Kw	105	0-2400
720	ARMIDALE NSW	AUS	30 30 0 S	151 40 0 E	0.05012Kw	24	1900-1400
720	ATHERTON QLD N	AUS	17 18 0 S	145 33 0 E	3.98107Kw	61	1900-1400
720	MURWILLUMB NSW	AUS	28 15 0 S	153 29 0 E	0.39811Kw	52	1900-1400
720	PERTH WA	AUS	31 51 0 S	115 49 0 E	50.1187Kw	177	2100-1600
720	AMBON	INS	3 41 0 S	128 10 0 E	10Kw	93	2000-1500
720	INVERCARGILL	NZL	46 19 0 S	168 37 0 E	19.9526Kw	150	0-2400
729	ADELAIDE SA	AUS	35 6 0 S	138 31 0 E	50.1187Kw	168	2000-1500
738	GRAFTON NSW	AUS	29 30 0 S	153 7 0 E	50.1187Kw	152	1900-1400
747	DALBY QLD	AUS	27 9 0 S	151 18 0 E	10Kw	219	1900-1400
747	KUMARA	NZL	42 34 0 S	171 9 0 E	10Kw	150	0-2400
756	KUNUNURRA WA	AUS	15 47 0 S	128 43 0 E	0.1Kw	21	2200-1600
756	MACKAY QLD	AUS	21 6 0 S	149 13 0 E	1.99526Kw	52	1900-1400
756	TAREE NSW	AUS	31 49 0 S	152 24 0 E	1.99526Kw		1900-1400
756	BEGA NSW	AUS	36 42 0 S	149 51 0 E	5.01187Kw		1900-1400
756	PURWOKERTO	INS	7 26 0 S	109 12 0 E	10Kw	99	2200-1700
756	AUCKLAND	NZL	36 51 0 S	174 38 0 E	19.9526Kw	150	0-2400
765	OPAPA	NZL	39 48 0 S	176 40 0 E	5.01187Kw		0-2400
774	MELBOURNE VIC	AUS	37 43 0 S	144 47 0 E	50.1187Kw	216	1900-1400
774	TOWNSVILLE QLD	AUS	19 19 0 S	147 1 0 E	5.01187Kw		0-2400
774	LAUTOKA	FJI	17 37 0 S	177 28 0 E	10Kw	45	1700-1200
783	ALBANY WA	AUS	35 0 0 S	117 50 0 E	1.99526Kw	55	1900-1400
783	KATOOMBA NSW	AUS	33 44 0 S	150 23 0 E	1.99526Kw	73	1900-1400
783	WELLINGTON	NZL	41 6 0 S	174 51 0 E	19.9526Kw	120	0-2400
792	BRISBANE QLD	AUS	27 19 0 S	153 1 0 E	10Kw	198	2000-1500
792	CAIRNS QLD	AUS	17 3 0 S	145 47 0 E	1.99526Kw	43	1900-1400
792	RENMARK SA	AUS	34 15 0 S	140 39 0 E	1.99526Kw	43	1900-1400
801	SEMARANG	INS	6 58 0 S	110 29 0 E	10Kw	94	2200-1700
801	NELSON	NZL	41 12 0 S	173 20 0 E	1Kw	50	0-2400
810	BEGA NSW	AUS	36 42 0 S	149 49 0 E	10Kw	137	1900-1400
810	PERTH WA	AUS	31 51 0 S	115 49 0 E	10Kw	177	2200-1700
810	LABASA	FJI	16 25 0 S	179 22 0 E	10Kw	30	1700-1200
810	MERAUKE	INS	8 30 0 S	140 22 0 E	5.01187Kw	104	2200-1500
810	DUNEDIN	NZL	45 53 0 S	170 36 0 E	19.9526Kw	150	0-2400
810	RABAU	PNG	4 15 0 S	152 10 0 E	1.99526Kw	60	2000-1400
819	GLEN INNES NSW	AUS	29 47 0 S	151 46 0 E	10Kw	143	1900-1400
819	MEDAN	INS	3 35 0 N	98 39 0 E	10Kw	66	2200-1700
819	PAENGAROA	NZL	37 49 0 S	176 25 0 E	10Kw	150	0-2400
828	GERALDTON WA	AUS	28 44 0 S	114 37 0 E	1.99526Kw	61	2100-1600
828	NAMBOUR QLD	AUS	26 37 0 S	153 2 0 E	5.01187Kw		1900-1400
828	SALE VIC	AUS	38 11 0 S	147 6 0 E	10Kw	152	1900-1400
828	PALMERSTON NO	NZL	40 22 0 S	175 33 0 E	1.99526Kw	60	0-2400
837	ESPERANCE WA	AUS	33 45 0 S	121 51 0 E	1Kw	62	2100-1600
837	QUEENSTOWN TAS	AUS	42 5 0 S	145 32 0 E	0.50119Kw	46	1900-1400
837	ROCKHAMPTON QL	AUS	23 26 0 S	150 27 0 E	10Kw	128	1900-1400
837	KAITAIA	NZL	35 3 0 S	173 15 0 E	1.99526Kw	50	0-2400
837	NIUE	NZL	19 2 0 S	169 55 0 E	1.99526Kw	75	0-2400
837	OTAIKA	NZL	35 47 0 S	174 19 0 E	2.51189Kw	50	0-2400
846	CAIRNS QLD	AUS	16 54 0 S	145 49 0 E	5.01187Kw		1900-1400
846	CANBERRA ACT	AUS	35 13 0 S	149 7 0 E	10Kw	192	1900-1500
846	CARNARVON WA	AUS	24 52 0 S	113 40 0 E	0.19953Kw	34	2100-1600
846	TARAWA	KIR	1 21 0 N	172 56 0 E	10Kw	31	1900-1100
846	MASTERTON	NZL	40 58 0 S	175 35 0 E	1.99526Kw	55	0-2400
855	EIDSVOLD QLD	AUS	25 25 0 S	151 7 0 E	10Kw	137	1900-1400
855	PIALBA QLD	AUS	25 17 0 S	152 50 0 E	10Kw		1900-1400
855	MATARAM	INS	8 36 0 S	116 8 0 E	5.01187Kw	86	2100-1600
855	MEDAN	INS	3 35 0 N	98 39 0 E	100Kw	163	2200-1400

ASSIGNED FREQUENCY	PLACE	COUNTRY	GEOGRAPHIC COORDINATES		CARRIER POWER	ANTENNA HEIGHT(m)	OPERATING HOURS
			LATITUDE	LONGITUDE			
864	HOBART TAS	AUS	42 55 0 S	147 19 0 E	1.99526Kw	88	0-2400
864	NORTHAM WA	AUS	31 41 0 S	116 36 0 E	1.99526Kw	76	1900-1400
864	TOOWOOMBA QLD	AUS	27 36 0 S	151 55 0 E	1.99526Kw	84	1900-1400
864	AVARUA	NZL	21 12 0 S	159 46 0 E	3.01995Kw	30	1600-900
864	INTERCARGILL	NZL	46 19 0 S	168 37 0 E	10Kw	150	0-2400
864	MADANG	PNG	5 13 0 S	145 49 0 E	1.99526Kw	60	2000-1400
873	SYDNEY NSW	AUS	33 49 0 S	151 5 0 E	5.01187Kw	155	0-2400
873	ASHBURTON	NZL	43 48 0 S	171 42 0 E	1Kw	50	0-2400
882	BRISBANE QLD	AUS	27 28 0 S	153 8 0 E	5.01187Kw		0-2400
882	PERTH WA	AUS	32 2 0 S	115 48 0 E	5.01187Kw	86	0-2400
882	WARRNAMBOOL VIC	AUS	38 20 0 S	142 30 0 E	1.99526Kw		1900-1400
882	AUCKLAND	NZL	36 51 0 S	174 38 0 E	10Kw	150	0-2400
891	ADELAIDE SA	AUS	35 6 0 S	138 31 0 E	50.1187Kw	168	1900-1400
891	LAUTOKA	FJI	17 37 0 S	177 28 0 E	10Kw	45	1700-1200
891	MALANG	INS	7 59 0 S	112 45 0 E	10Kw	84	2200-1700
891	WELLINGTON	NZL	41 13 0 S	174 52 0 E	10Kw	50	0-2400
900	ALICE SPR NT	AUS	23 46 0 S	133 52 0 E	1.99526Kw	46	1900-1400
900	BRIDGETOWN WA	AUS	34 3 0 S	116 10 0 E	1.99526Kw	143	1900-1400
900	DEVENPORT TAS	AUS	41 10 0 S	146 19 0 E	1.99526Kw	56	1900-1400
900	LISMORE NSW	AUS	28 49 0 S	153 21 0 E	1.99526Kw	83	1900-1400
900	DUNEDIN	NZL	45 53 0 S	170 35 0 E	10Kw	150	0-2400
900	WHANGAGEI	NZL	35 41 0 S	174 19 0 E	1.25893Kw	83	0-2400
900	GOROKA	PNG	6 5 0 S	145 23 0 E	1.99526Kw	60	2000-1400
918	CHARLEVIL QLD	AUS	26 23 0 S	146 13 0 E	5.01187Kw		1900-1400
918	COOMA NSW	AUS	36 14 0 S	149 9 0 E	1.99526Kw	81	1900-1400
918	NARROGIN WA	AUS	32 58 0 S	117 13 0 E	1.99526Kw	82	1900-1400
918	SURABAYA	INS	7 14 0 S	112 45 0 E	10Kw	82	2200-1700
918	KUMARA	NZL	42 34 0 S	171 9 0 E	10Kw	150	0-2400
927	GLADSTONE QLD	AUS	23 52 0 S	151 13 0 E	5.01187Kw		1900-1400
927	MELBOURNE VIC	AUS	37 44 0 S	145 6 0 E	5.01187Kw	142	0-2400
927	PERTH WA	AUS	32 1 0 S	115 53 0 E	0.50119Kw	46	2100-1600
927	SIGATOKA	FJI	18 9 0 S	177 31 0 E	2.51189Kw	30	1700-1200
927	PAKANBARU	INS	0 33 0 N	101 30 0 E	50.1187Kw	162	2200-1700
927	PALMERSTON NO	NZL	40 21 0 S	175 34 0 E	1.99526Kw	55	0-2400
936	AYR QLD	AUS	19 30 0 S	147 15 0 E	5.01187Kw		1900-1400
936	HOBART TAS	AUS	42 55 0 S	147 30 0 E	10Kw		1900-1400
945	BENDIGO VIC	AUS	36 42 0 S	144 13 0 E	1.99526Kw	78	1900-1400
945	SYDNEY NSW	AUS	33 51 0 S	151 4 0 E	5.01187Kw	145	0-2400
945	GISBORNE	NZL	38 42 0 S	178 4 0 E	5.01187Kw	50	0-2400
945	GIZO ISLAND	SLM	8 6 0 S	156 50 0 E	10Kw	90	1900-1200
954	KENDARI	INS	3 57 0 S	122 36 0 E	10Kw	78	2100-1600
954	HAMILTON	NZL	37 53 0 S	175 21 0 E	1.99526Kw	50	0-2400
963	BUNBURY WA	AUS	33 20 0 S	115 45 0 E	1.99526Kw	57	1900-1400
963	GRIFFITH NSW	AUS	34 19 0 S	146 8 0 E	1.99526Kw		1900-1400
963	WARWICK QLD	AUS	28 1 0 S	151 58 0 E	5.01187Kw		1900-1400
963	JEMBER	INS	8 7 0 S	113 45 0 E	10Kw	78	2200-1700
963	CHRISTCHURCH	NZL	43 42 0 S	172 39 0 E	10Kw	120	0-2400
972	ADELAIDE SA	AUS	34 50 0 S	138 34 0 E	1.99526Kw	141	0-2400
972	MURWILLUMB NSW	AUS	28 19 0 S	153 30 0 E	5.01187Kw		1900-1400
972	TITAHIB	NZL	41 6 0 S	174 51 0 E	3.98107Kw	77	0-2400
981	HAMILTON VIC	AUS	37 41 0 S	142 1 0 E	1.99526Kw	75	0-2400
981	KALGOORLIE WA	AUS	30 44 0 S	121 30 0 E	1.99526Kw	29	1900-1400
981	ROCKHAMPTON QL	AUS	23 21 0 S	150 28 0 E	1.99526Kw	48	1900-1400
981	KAIKOHE	NZL	35 22 0 S	173 52 0 E	1.99526Kw	50	0-2400
981	OAMARU	NZL	45 4 0 S	170 56 0 E	0.50119Kw	76	0-2400
990	GOVE NT	AUS	12 11 0 S	136 47 0 E	0.50119Kw	61	1900-1400
990	PERTH WA	AUS	32 0 0 S	115 50 0 E	1.99526Kw	78	0-2400
990	NAULU REWA	FJI	18 4 0 S	178 32 0 E	10Kw	60	1700-1200
990	NELSON	NZL	41 20 0 S	173 13 0 E	5.01187Kw	76	0-2400
999	BROKEN HLL NSW	AUS	31 56 0 S	141 29 0 E	1.99526Kw		1900-1400
999	NOWRA NSW	AUS	34 53 0 S	150 32 0 E	5.01187Kw		1900-1400
999	JAKARTA	INS	6 14 0 S	106 53 0 E	301.995Kw	150	2200-1700

ASSIGNED FREQUENCY	PLACE	COUNTRY	GEOGRAPHIC COORDINATES		CARRIER POWER	ANTENNA HEIGHT(m)	OPERATING HOURS
			LATITUDE	LONGITUDE			
1008	GERALDTON WA	AUS	28 43 0 S	114 37 0 E	1.99526Kw	54	1900-1400
1008	LAUNGESTON TAS	AUS	41 27 0 S	147 13 0 E	1.99526Kw		1900-1400
1008	MADIUM	INS	7 36 0 S	111 31 0 E	10Kw	84	2200-1700
1008	PAENGAROA	NZL	37 49 0 S	176 25 0 E	10Kw	150	0-2400
1017	SYDNEY NSW	AUS	33 50 0 S	151 4 0 E	5.01187Kw	147	0-2400
1017	NUKUALOFA	TON	21 8 0 S	175 10 0 E	10Kw	61	1800-1000
1026	MELBOURNE VIC	AUS	37 44 0 S	145 5 0 E	5.01187Kw	132	0-2400
1026	PT HEDLAND WA	AUS	20 23 0 S	118 34 0 E	1Kw	67	2100-1600
1026	INVERCARGILL	NZL	46 25 0 S	168 29 0 E	1Kw	73	0-2400
1026	KAITIA	NZL	35 2 0 S	173 15 0 E	1.99526Kw	50	0-2400
1026	OTAIKA	NZL	35 47 0 S	174 19 0 E	5.01187Kw	91	0-2400
1026	HONIARA	SLM	9 25 0 S	159 58 0 E	5.01187Kw	61	1900-1200
1035	WELLINGTON	NZL	41 6 0 S	174 51 0 E	19.9526Kw	120	0-2400
1044	CRYSTAL BRK SA	AUS	33 20 0 S	138 16 0 E	1.99526Kw	153	1900-1400
1044	MUSWELLBRK NSW	AUS	32 14 0 S	150 55 0 E	1Kw		1900-1400
1044	DUNEDIN	NZL	45 53 0 S	170 36 0 E	10Kw	120	0-2400
1053	CANBERRA ACT	AUS	35 13 0 S	149 7 0 E	5.01187Kw		0-2400
1053	JAYAPURA	INS	2 37 0 S	140 39 0 E	10Kw	71	2000-1500
1053	NEW PLYMOUTH	NZL	39 2 0 S	174 8 0 E	1.99526Kw	50	0-2400
1062	THURSDAY I QLD	AUS	10 35 0 S	142 13 0 E	1.99526Kw	65	1900-1400
1062	APIA	SMO	13 47 0 S	171 50 0 W	10Kw	100	0-2400
1071	KATANNING WA	AUS	33 39 0 S	117 30 0 E	1.99526Kw	70	1900-1400
1071	KINGAROY QLD	AUS	26 24 0 S	151 50 0 E	1.99526Kw	67	1900-1400
1071	MARYBOROUGH VIC	AUS	37 2 0 S	143 49 0 E	5.01187Kw		1900-1400
1080	GUNNEDAH NSW	AUS	30 59 0 S	150 13 0 E	1.99526Kw	50	1900-1400
1080	HOBART TAS	AUS	42 55 0 S	147 24 0 E	1.99526Kw	69	0-2400
1080	MT ISA QLD	AUS	20 41 0 S	139 30 0 E	0.19953Kw	49	1900-1400
1080	PERTH WA	AUS	31 56 0 S	115 54 0 E	1.99526Kw	79	0-2400
1080	SINGARADJA	INS	8 6 0 S	115 4 0 E	10Kw	70	2100-1600
1080	AUCKLAND	NZL	36 51 0 S	174 38 0 E	10Kw	120	0-2400
1089	ORANGE NSW	AUS	33 28 0 S	149 8 0 E	5.01187Kw		1900-1400
1089	NAULU REWA	FJI	18 4 0 S	178 32 0 E	10Kw	60	1700-1200
1089	CIREBON	INS	6 48 0 S	108 34 0 E	10Kw	69	2200-1700
1098	LAUNGESTON TAS	AUS	41 23 0 S	147 4 0 E	1.99526Kw	55	0-2400
1098	LONGREACH QLD	AUS	23 23 0 S	144 13 0 E	1.99526Kw	58	1900-1400
1098	MERREDIN WA	AUS	31 30 0 S	118 12 0 E	1.99526Kw	69	1900-1400
1098	JAMBI	INS	1 36 0 S	103 39 0 E	10Kw	68	2200-1700
1098	SUMENEP	INS	7 1 0 S	113 51 0 E	10Kw	105	2200-1700
1098	CHRISTCHURCH	NZL	43 42 0 S	172 39 0 E	10Kw	120	0-2400
1107	SYDNEY NSW	AUS	33 51 0 S	151 4 0 E	5.01187Kw	144	0-2400
1107	YOGYAKARTA	INS	7 48 0 S	110 24 0 E	10Kw	68	2200-1700
1116	BRISBANE QLD	AUS	27 32 0 S	152 58 0 E	5.01187Kw		0-2400
1116	BIAK	INS	1 11 0 S	136 4 0 E	10Kw	100	2000-1500
1116	PAKANBARU	INS	0 33 0 N	101 30 0 E	10Kw	68	2200-1700
1116	NELSON	NZL	41 20 0 S	173 13 0 E	1.99526Kw	50	0-2400
1125	NAPIER	NZL	39 48 0 S	176 40 0 E	1.99526Kw	67	0-2400
1134	ARMIDALE NSW	AUS	30 33 0 S	151 42 0 E	1.99526Kw		1900-1400
1134	COLLAC VIC	AUS	38 19 0 S	143 32 0 E	5.01187Kw		1900-1400
1134	COLLIE WA	AUS	33 22 0 S	116 11 0 E	1.99526Kw	57	1900-1400
1134	BANJARMASIN	INS	3 22 0 S	114 33 0 E	50.1187Kw	132	2100-1600
1134	QUEENSTOWN	NZL	45 3 0 S	168 41 0 E	5.01187Kw	50	0-2400
1143	NEWCASTLE NSW	AUS	32 52 0 S	151 42 0 E	1.99526Kw	65	0-2400
1143	HAMILTON	NZL	37 41 0 S	175 24 0 E	1.99526Kw	50	0-2400

ASSIGNED FREQUENCY	PLACE	COUNTRY	GEOGRAPHIC COORDINATES		CARRIER POWER	ANTENNA HEIGHT(m)	OPERATING HOURS
			LATITUDE	LONGITUDE			
1152	WAGGAWAGGA NSW	AUS	35 2 0 S	147 25 0 E	1.99526Kw	111	1900-1400
1152	LABASA	FJI	16 25 0 S	179 22 0 E	2.51189Kw	30	1700-1200
1152	TIMARU	NZL	44 24 0 S	171 9 0 E	5.01187Kw	90	0-2400
1161	FINGAL TAS	AUS	41 37 0 S	147 59 0 E	1Kw		1900-1400
1161	MARYBOROUGH QL	AUS	25 28 0 S	152 44 0 E	1.99526Kw	63	1900-1400
1161	NARRACOORTE SA	AUS	36 56 0 S	140 39 0 E	10Kw		1900-1400
1161	WELLINGTON	NZL	41 18 0 S	174 48 0 E	5.01187Kw	50	0-2400
1170	SYDNEY NSW	AUS	33 46 0 S	151 3 0 E	5.01187Kw	135	0-2400
1170	SEMARANG	INS	6 58 0 S	110 29 0 E	50.1187Kw	64	2200-1700
1170	INVERCARGILL	NZL	46 25 0 S	168 29 0 E	0.50119Kw	64	0-2400
1170	TE KUITI	NZL	38 20 0 S	175 10 0 E	1Kw	55	0-2400
1179	MELBOURNE VIC	AUS	37 44 0 S	145 7 0 E	5.01187Kw	136	0-2400
1179	PADANG	INS	1 0 0 S	100 25 0 E	10Kw	64	2200-1700
1188	EXMOUTH WA	AUS	21 58 0 S	114 8 0 E	1.99526Kw	87	2200-1600
1188	INVERELL NSW	AUS	29 47 0 S	151 13 0 E	1.99526Kw	102	1900-1400
1197	ADELAIDE SA	AUS	34 50 0 S	138 35 0 E	1.99526Kw	84	0-2400
1197	GOLD COAST QLD	AUS	28 0 0 S	153 24 0 E	5.01187Kw		1900-1400
1197	WANGANUI	NZL	39 56 0 S	175 3 0 E	1.99526Kw	50	0-2400
1206	GRAFTON NSW	AUS	29 40 0 S	152 59 0 E	1.99526Kw		1900-1400
1206	PERTH WA	AUS	31 56 0 S	115 54 0 E	1.99526Kw	79	0-2400
1206	SIGATOKA	FJI	18 9 0 S	177 31 0 E	2.51189Kw	30	-
1206	DENPASAR	INS	8 40 0 S	115 14 0 E	10Kw	62	2100-1600
1206	DUNEDIN	NZL	45 53 0 S	170 30 0 E	1.99526Kw	40	0-2400
1215	JAKARTA	INS	6 23 0 S	106 45 0 E	10Kw	61	2200-1700
1215	KAIKOHE	NZL	35 22 0 S	173 52 0 E	1.99526Kw	50	0-2400
1224	INVERCARGILL	NZL	46 25 0 S	168 29 0 E	5.01187Kw	63	0-2400
1233	NEWCASTLE NSW	AUS	32 48 0 S	151 40 0 E	10Kw	91	1900-1400
1233	PONTIANAK	INS	0 5 0 S	109 16 0 E	50.1187Kw	70	2100-1600
1242	DARWIN NT	AUS	12 26 0 S	130 52 0 E	1.99526Kw	53	1900-1400
1242	Oakey QLD	AUS	27 28 0 S	151 45 0 E	1.99526Kw	60	0-2400
1242	PT AUGUSTA SA	AUS	32 42 0 S	137 56 0 E	1.99526Kw		1900-1400
1242	SALE VIC	AUS	38 4 0 S	147 2 0 E	5.01187Kw		1900-1400
1242	BOGOR SEMPLAK	INS	6 36 0 S	106 47 0 E	10Kw	60	2200-1700
1242	MURUPAPA	NZL	38 28 0 S	176 38 0 E	1Kw	50	0-2400
1242	TIMARU	NZL	44 24 0 S	171 9 0 E	0.50119Kw	60	0-2400
1242	WHAKATANE	NZL	37 58 0 S	176 53 0 E	1.99526Kw	50	0-2400
1251	DUBBO NSW	AUS	32 16 0 S	148 40 0 E	1.99526Kw	96	1900-1400
1251	BANDA ACEH	INS	5 30 0 N	95 20 0 E	10Kw	61	2200-1700
1251	AUCKLAND	NZL	36 51 0 S	174 38 0 E	5.01187Kw	120	0-2400
1251	QUEENSTOWN	NZL	45 3 0 S	168 41 0 E	1Kw	60	0-2400
1260	SHEPPARTON VIC	AUS	36 23 0 S	145 31 0 E	1.99526Kw	130	1900-1400
1260	CHRISTCHURCH	NZL	43 31 0 S	172 37 0 E	1.99526Kw	50	0-2400
1269	SYDNEY NSW	AUS	33 50 0 S	151 4 0 E	5.01187Kw	123	0-2400
1269	TAKAKA	NZL	40 52 0 S	172 49 0 E	0.39811Kw	45	0-2400
1278	MELBOURNE VIC	AUS	37 40 0 S	145 6 0 E	5.01187Kw	97	0-2400
1278	NAPIER	NZL	39 34 0 S	176 52 0 E	1.99526Kw	40	0-2400
1287	TAMWORTH NSW	AUS	31 10 0 S	150 56 0 E	1.99526Kw	122	1900-1400
1287	RAKIRAKI	FJI	17 22 0 S	178 9 0 E	2.51189Kw	30	1700-1200
1287	PALEMBANG	INS	2 59 0 S	104 45 0 E	50.1187Kw	159	2200-1700
1287	WESTPORT	NZL	41 51 0 S	171 28 0 E	1.99526Kw	50	0-2400
1296	BRISBANE QLD	AUS	27 28 0 S	153 7 0 E	5.01187Kw		0-2400
1296	MT GAMBIER SA	AUS	37 48 0 S	140 43 0 E	1.99526Kw		1900-1400
1296	HAMILTON	NZL	37 42 0 S	175 24 0 E	5.01187Kw	50	0-2400
1305	DUNEDIN	NZL	45 53 0 S	170 35 0 E	1.99526Kw	36	0-2400
1314	BALLARAT VIC	AUS	37 33 0 S	143 47 0 E	5.01187Kw		0-2400
1314	WOLLONGONG NSW	AUS	34 31 0 S	150 52 0 E	5.01187Kw		0-2400
1314	GISBORNE	NZL	38 42 0 S	178 4 0 E	1.99526Kw	50	0-2400
1323	ADELAIDO SA	AUS	34 50 0 S	138 35 0 E	1.99526Kw	84	0-2400
1323	GOSFORD NSW	AUS	33 22 0 S	151 23 0 E	5.01187Kw		1900-1400
1323	NAURU ISLAND	NRU	0 32 0 S	166 56 0 E	0.19953Kw	40	2000-1200
1323	CHRISTCHURCH	NZL	43 34 0 S	172 35 0 E	5.01187Kw	50	0-2400
1323	RAKIRAKI	FJI	17 22 0 S	178 9 0 E	2.51189Kw	30	1700-1200

ASSIGNED FREQUENCY	PLACE	COUNTRY	GEOGRAPHIC COORDINATES		CARRIER POWER	ANTENNA HEIGHT(m)	OPERATING HOURS
			LATITUDE	LONGITUDE			
1332	BUNDABERG QLD	AUS	24 51 0 S	152 24 0 E	5.01187Kw	54	1900-1400
1332	SWAN HILL VIC	AUS	35 25 0 S	143 34 0 E	1.99526Kw	57	1900-1400
1332	JAKARTA	INS	6 23 0 S	106 45 0 E	10Kw	56	2200-1700
1332	AUCKLAND	NZL	36 53 0 S	174 40 0 E	5.01187Kw		0-2400
1341	GEELONG VIC	AUS	38 12 0 S	144 20 0 E	5.01187Kw		1900-1400
1341	SIGATOKA	FJI	18 9 0 S	177 31 0 E	2.51189Kw	30	1700-1200
1341	TANJUNGPINANG	INS	0 55 0 N	104 28 0 E	5.01187Kw	56	2200-1700
1341	NELSON	NZL	41 20 0 S	173 13 0 E	1.99526Kw	50	0-2400
1350	ROTORUA	NZL	38 10 0 S	176 14 0 E	1.99526Kw	50	0-2400
1359	YOUNG NSW	AUS	34 20 0 S	148 21 0 E	1.99526Kw	59	1900-1400
1359	QUEENSTOWN	NZL	45 3 0 S	168 42 0 E	1Kw	36	0-2400
1368	MT ISA QLD	AUS	20 43 0 S	139 30 0 E	1.99526Kw	21	1900-1400
1368	GRAYMOUTH	NZL	42 34 0 S	171 9 0 E	0.50119Kw	55	0-2400
1377	ALICE SPR NT	AUS	23 42 0 S	133 53 0 E	1.99526Kw	21	1900-1400
1386	TURANGI	NZL	38 59 0 S	175 48 0 E	1Kw	50	0-2400
1386	KIRAKIRA	SLM	10 27 0 S	161 55 0 E	10Kw	77	1900-1200
1395	LITHGOW NSW	AUS	33 24 0 S	150 6 0 E	5.01187Kw		1900-1400
1395	OAMARU	NZL	45 4 0 S	170 55 0 E	1.99526Kw	85	0-2400
1404	PARKES NSW	AUS	33 9 0 S	148 13 0 E	1.99526Kw	53	1900-1400
1404	MULIVAI	SMO	14 2 0 S	171 46 0 E	10Kw	60	0-2400
1413	NEWCASTLE NSW	AUS	32 51 0 S	151 42 0 E	1.99526Kw	54	0-2400
1413	TOKOROA	NZL	38 10 0 S	175 47 0 E	1.99526Kw	55	0-2400
1422	MELBOURNE VIC	AUS	34 44 0 S	145 5 0 E	5.01187Kw	97	0-2400
1422	PT VILA	VUT	17 45 0 S	168 18 0 E	1.99526Kw	50	0-2400
1431	WOLLONGONG NSW	AUS	34 32 0 S	150 52 0 E	1.99526Kw	26	0-2400
1431	DUNEDIN	NZL	45 53 0 S	170 30 0 E	1Kw	30	0-2400
1440	CANBERRA ACT	AUS	35 13 0 S	149 7 0 E	1.99526Kw	40	2000-1400
1449	MUDGEES NSW	AUS	32 35 0 S	149 35 0 E	1.99526Kw		1900-1400
1449	PALMERSTON NO	NZL	40 21 0 S	175 34 0 E	5.01187Kw	55	0-2400
1458	MURRAY BRDG SA	AUS	35 7 0 S	139 16 0 E	1.99526Kw	52	1900-1400
1458	MUSWELLBRK NSW	AUS	32 14 0 S	150 54 0 E	5.01187Kw	52	1900-1400
1458	WESTPORT	NZL	41 51 0 S	171 28 0 E	1.99526Kw	50	0-2400
1467	MILDURA VIC	AUS	34 11 0 S	142 7 0 E	1.99526Kw	55	1900-1400
1467	RAKIRAKI	FJI	17 22 0 S	178 9 0 E	2.51189Kw	30	1700-1200
1476	ROMA QLD	AUS	26 34 0 S	148 49 0 E	1.99526Kw	52	1900-1400
1476	SURAKARTA	INS	7 32 0 S	110 50 0 E	5.01187Kw	100	2200-1700
1476	AUCKLAND	NZL	36 57 0 S	174 46 0 E	5.01187Kw		0-2400
1485	BRISBANE QLD	AUS	27 31 0 S	153 0 0 E	0.25119Kw	45	0-2400
1485	HUGHENDEN QLD	AUS	20 51 0 S	144 11 0 E	0.05012Kw	45	1900-1400
1485	LITHGOU NSW	AUS	33 29 0 S	150 9 0 E	0.19953Kw	37	1900-1400
1485	PT LINCOLN SA	AUS	34 44 0 S	135 52 0 E	0.19953Kw	37	1900-1400
1485	WOLLONGONG NSW	AUS	34 31 0 S	150 52 0 E	0.1Kw	30	0-2400
1485	LABASA	FJI	16 25 0 S	179 22 0 E	1Kw	30	1700-1200
1485	SIGATOGA	FJI	18 9 0 S	177 31 0 E	1Kw	30	1700-1200
1485	BLLENHEIM	NZL	41 31 0 S	173 57 0 E	0.50119Kw	50	0-2400
1485	TWIZEL	NZL	44 15 0 S	170 3 0 E	1Kw	30	0-2400
1494	ALBURY NSW	AUS	36 3 0 S	146 58 0 E	1.99526Kw	54	1900-1400
1494	TAUPO	NZL	38 40 0 S	176 4 0 E	1.99526Kw	50	0-2400
1503	BATHURST NSW	AUS	33 22 0 S	149 32 0 E	5.01187Kw		0-2400
1503	MELBOURNE VIC	AUS	37 45 0 S	145 6 0 E	5.01187Kw		0-2400
1503	CHRISTCHURCH	NZL	43 29 0 S	172 38 0 E	1.99526Kw	100	0-2400
1503	WELLINGTON	NZL	41 13 0 S	174 51 0 E	5.01187Kw	60	0-2400

ASSIGNED FREQUENCY	PLACE	COUNTRY	GEOGRAPHIC COORDINATES		CARRIER POWER	ANTENNA HEIGHT(m)	OPERATING HOURS
			LATITUDE	LONGITUDE			
1512	NEWCASTLE NSW	AUS	32 48 0 S	151 40 0 E	10Kw	91	2000-1500
1512	TAUMARUNUI	NZL	38 53 0 S	175 16 0 E	1Kw	40	0-2400
1521	DENILQUIN NSW	AUS	35 37 0 S	144 55 0 E	1.99526Kw	102	1900-1400
1521	REEFTON	NZL	42 5 0 S	171 51 0 E	1.99526Kw	50	0-2400
1530	MOREE NSW	AUS	29 29 0 S	149 54 0 E	1.99526Kw	50	1900-1400
1530	NEW PLYMOUTH	NZL	39 2 0 S	174 8 0 E	1Kw	50	0-2400
1539	BLenheim	NZL	41 31 0 S	173 58 0 E	1.99526Kw	40	0-2400
1539	PICTRON	NZL	41 18 0 S	174 0 0 E	0.1Kw	40	0-2400
1548	EMERALD QLD	AUS	23 27 0 S	148 10 0 E	50.1187Kw	94	1900-1400
1557	TAREE NSW	AUS	31 56 0 S	152 28 0 E	1.99526Kw	100	1900-1400
1557	HAWERA	NZL	39 31 0 S	174 16 0 E	1.99526Kw	50	0-2400
1557	WANGANUI	NZL	39 58 0 S	175 5 0 E	1.99526Kw	48	0-2400
1566	GYMPIE QLD	AUS	26 13 0 S	152 42 0 E	0.19953Kw	36	1900-1400
1566	WANGARATTA VIC	AUS	36 19 0 S	146 23 0 E	1.99526Kw	95	1900-1400
1566	SUVA	FJI	18 9 0 S	178 26 0 E	5.01187Kw	20	1700-1200
1584	MT GAMBIER SA	AUS	37 50 0 S	140 47 0 E	0.19953Kw	21	1900-1400
1584	NEWCASTLE NSW	AUS	32 52 0 S	151 42 0 E	0.1Kw	31	0-2400
1584	S HELENS TAS	AUS	41 20 0 S	148 17 0 E	0.1Kw	48	1900-1400
1584	WILCANNIA NSW	AUS	31 34 0 S	143 22 0 E	0.1Kw	48	1900-1400
1584	WOOMERA SA	AUS	31 12 0 S	136 49 0 E	0.05012Kw	21	1900-1400
1584	DRASA	FJI	17 35 0 S	177 31 0 E	1Kw	90	1700-1200
1584	NAULU REWA	FJI	18 4 0 S	178 32 0 E	1Kw	60	1700-1200
1584	PICTRON	NZL	41 17 0 S	174 1 0 E	0.39811Kw	47	0-2400
1593	RENMARK SA	AUS	34 16 0 S	140 37 0 E	1.99526Kw	37	1900-1400
1593	SOUTHPORT QLD	AUS	28 3 0 S	153 26 0 E	0.19953Kw	33	1900-1400
1593	AUCKLAND	NZL	36 57 0 S	174 52 0 E	5.01187Kw		0-2400
1593	VANIMO	PNG	2 42 0 S	141 17 0 E	10Kw	80	2000-2200
1602	COOMA NSW	AUS	36 13 0 S	149 8 0 E	0.05012Kw	24	1900-1400
1602	LEIGH CREEK SA	AUS	30 28 0 S	138 25 0 E	0.05012Kw	22	1900-1400
1602	WARRNAMBOOL VIC	AUS	38 22 0 S	142 30 0 E	0.19953Kw	30	1900-1400
1602	RAKIRAKI	FJI	17 22 0 S	178 9 0 E	1Kw	30	1700-1200
1602	INVERCARGILL	NZL	46 25 0 S	168 29 0 E	1Kw	47	0-2400

添付資料6 電波観測データ

電波観測データ (ITU 変更登録の手続き)

(2008 年 6 月 3 日ツ国外務省 Mr. Pasuna Tunaga と首相府 TMD Mr. Stanley Manao へ送付済み)

Measurement Results and Recommendations

1. Measurement Set-Up

Location : Funafuti in Tuvalu and Korotago (near Singatoka) in Fiji

Date : from 13/05/2008 to 19/05/2008 in Funafuti, Tuvalu
 from 28/05/2008 to 02/06/2008 in Korotago, Fiji

Instrument: KFI-3301 MF Field Strength Meter, Kyoritsu Corporation

Direction: toward New Zealand (from 13/05/2008 to 16/05/2008 in Funafuti, Tuvalu)
 (from 28/05/2008 to 30/05/2008 in Korotago, Fiji)
 toward Australia (from 16/05/2008 to 19/05/2008 in Funafuti, Tuvalu)
 (from 31/05/2008 to 02/06/2008 in Korotago, Fiji)

Indication: the maximum field strength at each time during the date above

2. Suitable Frequencies

From the measured data in Funafuti Tuvalu, 531 kHz, 603 kHz and 765 kHz are nominated as suitable frequencies besides 621 kHz.

2.1 Interference Strength of 621 kHz from outside

Frequency	Country	Carrier Power kW	Antenna Height m	Result
621kHz	Tuvalu	1.99526 [applying 10]	31 [applying 45]	-----
	Australia	50.1187	216	Masked by NZL 621kHz
	New Zealand	1.99526	121	Interference over 40dB during 20:00-5:00

2.2 Interference Strength of some Look-Like No Interference Frequencies

Frequency	Country	Carrier Power kW	Antenna Height m	Result
540kHz	Australia	10	198	Masked by INS 540kHz
		1.99526		
540kHz	Indonesia	5.01187	139	Interference over 40dB during 18:00-4:00
666kHz	North Korea	(1000)		Interference over 40dB during 18:00-5:00
729kHz	Australia	50.1187	168	Interference over 40dB during 18:00-6:00
1179kHz	Australia	5.01187	136	Interference < 30dB
	Indonesia	10	64	

2.3 Interference of some Recommendable Frequencies less than 621 kHz

Frequency	Country	Carrier Power kW	Antenna Height m	Result
531kHz	Australia	0.50119	37	Interference over 40dB during 21:00-4:00
		10	213	
		5.01187		
		5.01187		
	New Zealand	1.99526	107	Masked by AUS 531kHz
603kHz	Australia	10	201	Interference over 40dB during 20:00-4:00
		1.99526	41	

2.4 Interference of some Recommendable Frequencies more than 621 kHz

Frequency	Country	Carrier Power kW	Antenna Height m	Result
765kHz	New Zealand	19.9526	150	Interference over 40dB around 1:00
909kHz	No Neighbour			Interference < 40dB
1179kHz	Australia	5.01187	136	Interference < 30dB
	Indonesia	10	64	

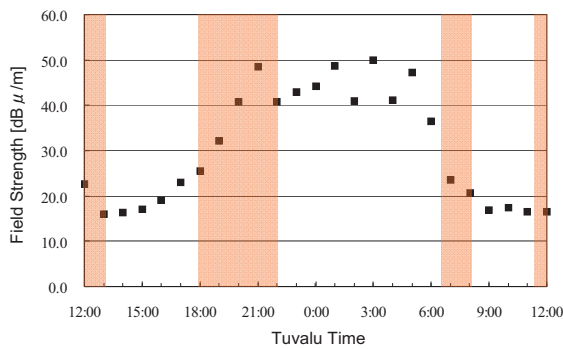


Fig.2-1 Interference from New Zealand 621kHz

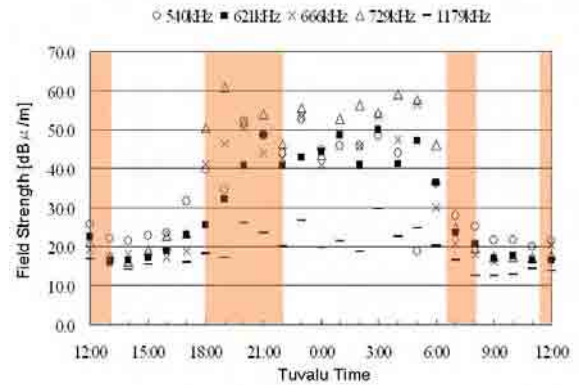
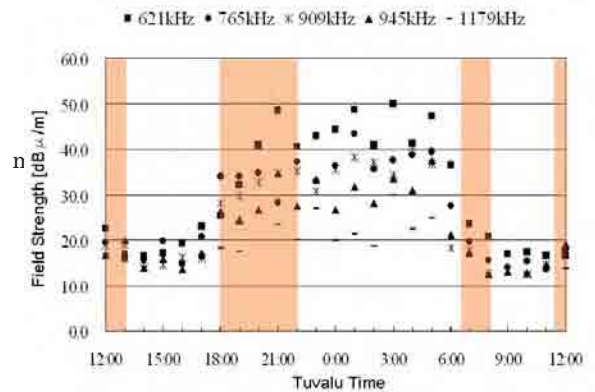
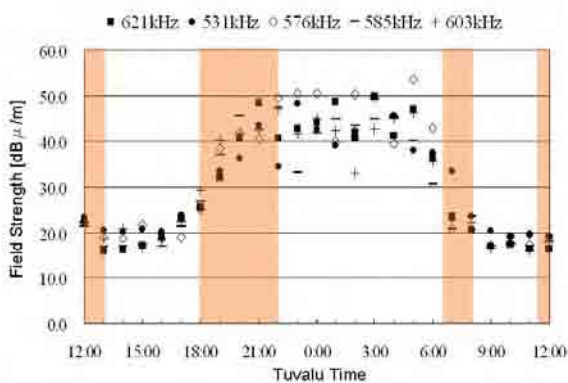


Fig.2-2 Interference of some Look-Like Non Interference Frequencies

(The red zone of the graph is the current broadcasting time of Radio Tuvalu)



3. Required Output Power

From the measured data in Funafuti Tuvalu and Korotago Fiji, the characteristics of the nominated frequencies with 45 m antenna are calculated as below. Note that 10 kW at 621 kHz interferes the area of Whangarei as a 6dB plus of the table. From this view point in addition to the view point of reducing electricity consumption with keeping the coverage, 5 kW at 621 kHz operation is recommended. And note that the recommended actual output powers of 531 kHz and 765 kHz are 5 kW and 10 kW respectively because the electricity consumption of the system is not quite different from 4 kW and 8 kW respectively.

Frequency	Output Power (actuality)	North End of Tuvalu (Unit: dB μ /m)		South End of Tuvalu (Unit: dB μ /m)		Interference Level from Tuvalu to Outside Country (Unit: dB μ /m)			Station Name considered to be Interfered
		Received Level from Funafuti	Interference Level during Night Time	Received Level from Funafuti	Interference Level during Night Time	Day Time	Night Time	Average of Whole Day	
621 kHz	5 kW	48.0	17.6 \pm 7.0	72.0	48.2 \pm 7.0	17.2 \pm 8.6	37.2 \pm 7.0	32.2 \pm 7.4	Whangarei, NZL
531 kHz	4 (5) kW		26.5 \pm 6.7		42.0 \pm 6.7	21.2 \pm 8.1	35.5 \pm 6.7	31.4 \pm 5.5	Tasmania, AUS
603 kHz	5 kW		21.5 \pm 5.3		42.3 \pm 5.3	13.3 \pm 7.3	22.2 \pm 5.3	16.8 \pm 6.6	Kempsey, AUS
765 kHz	8 (10) kW		9.3 \pm 4.3		43.9 \pm 4.3	21.2 \pm 5.6	36.3 \pm 4.3	31.2 \pm 6.2	Opapa, NZL

(Interference level is explained as the average plus minus the standard deviation)

3.1 Interference Strength of 621 kHz from Whangarei, New Zealand

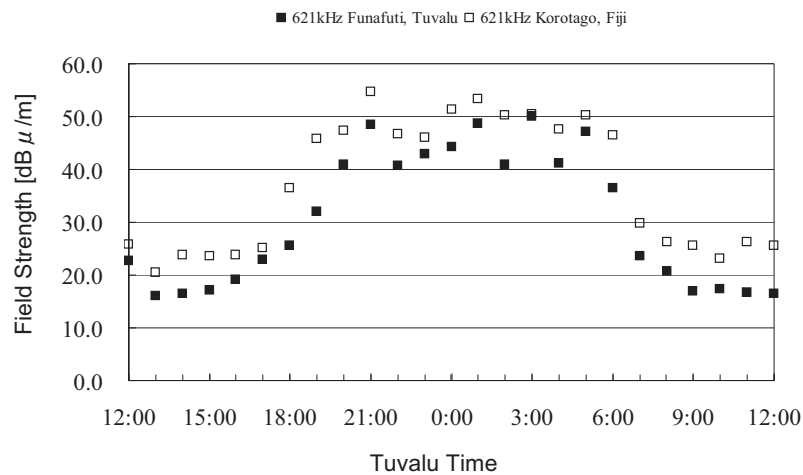


Fig.3-1 Interference Strength of 621 kHz

3.2 Interference Strength of 531 kHz from Kempsey, Australia

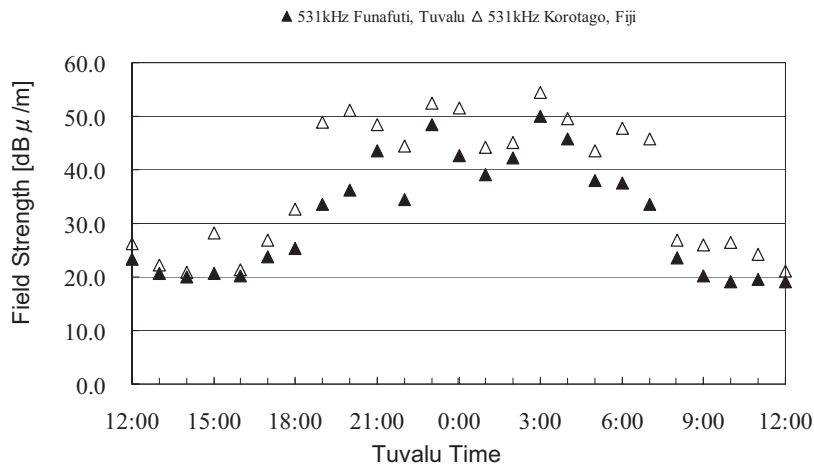


Fig.3-2 Interference Strength of 531 kHz

3.3 Interference Strength of 765 kHz from Opapa, New Zealand

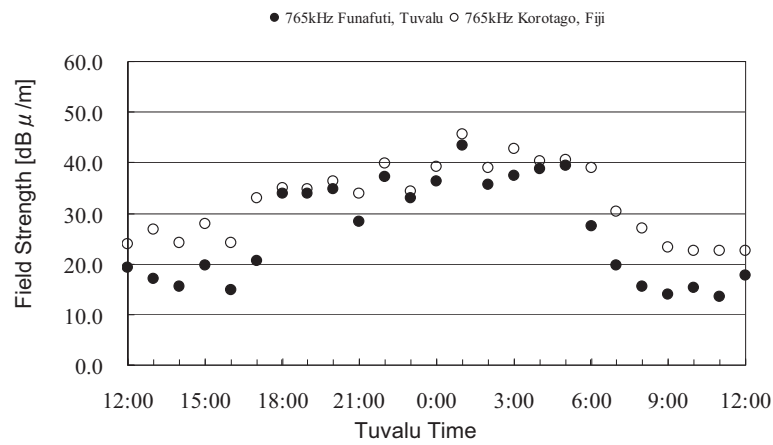


Fig.3-3 Interference Strength of 765 kHz

4. Conclusion and Some Recommendations

4-1 First Priority

From the view point of carrying out this project with the shortest time period, 621 kHz, 5 kW, 45 m is the first priority. In this case, the acceptance of the condition (621kHz, equal or more than 5kW, 45m) officially submitted on 31/03/2008 (Weekly Circular starts in June) is necessary from ITU.

4-2 Next Priority

For the purpose of reducing the cost of electricity, 531 kHz, 5 kW, 45 m is the second and 603 kHz, 5 kW, 45 m is the third priority. If 10 kW can be afforded to be operated, 765 kHz is the fourth priority.

In those cases above, registration processes to ITU and an acceptance from ITU are necessary.

4-3 Recommendable Approach

To obtain the acceptance from ITU with the shortest time period, the bilateral talk with Australia and New Zealand is recommended. The 621 kHz and all frequencies recommended are operated in only Australia and New Zealand.

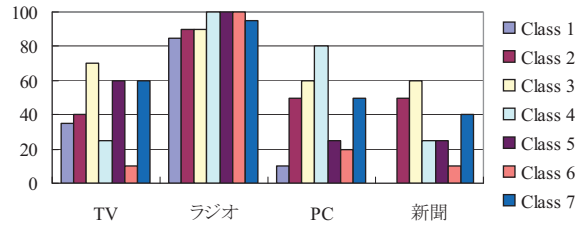
In the case of 531 kHz, 603 kHz and 765 kHz, the simultaneously actions of the bilateral talk and the ITU assignment process will be recommended.

Frequency	Bilateral Talk	Requested Minimum Output Power	Comment
531 kHz	Australia	4 kW, 45 m (5kW operation is recommended)	Recommended
	New Zealand		
603 kHz	Australia	5 kW, 45 m	Recommended
621 kHz	Australia	5 kW, 45 m	Submitted as 10kW to ITU
	New Zealand		
765 kHz	New Zealand	8 kW, 45 m (10kW operation is recommended)	Recommended

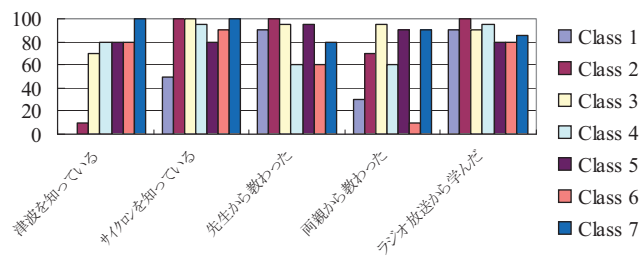
添付資料7 児童へのアンケート結果

フナフティ Nauti Primary School 児童へのアンケート調査結果

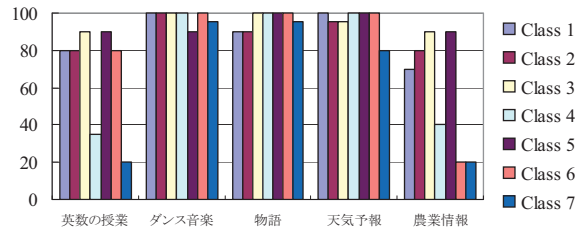
家庭で持っている情報源（単位%）



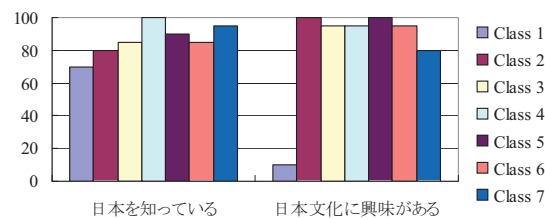
自然災害の認識・サイクロンを誰から学んだか（単位%）



児童が興味を示すラジオ番組（単位%）



児童が日本に興味を示す割合（単位%）



児童と先生

Nauti Primary School

児童数: 817 人

教師数: 35 人

参考: 現在 5 教室が不足し市内に間借り。
水不足で生徒が飲料水を持参するも、
各児童が持参するのは二口程度。
持参できない児童も多い。
学校の水はトイレだけに使用。

添付資料 8 TMD のスタジオ局舎建設計画

2002年 TMD 新スタジオ局舎計画 (1/6)

File copy

128/08/02

TMC's Copy

24 October 2002

Mr. Fanoanoaga Patolo
Chief Lands Officer
Funafuti



Dear Fanoanoaga,

Subject: Land Lease of TMC New Building's Location

I now forward the *draft design* of our new building for clarification purposes.

The purpose of this letter is to seek your assistance in advising us of the actual land lease owns by TMC at the present site of the office building. We are currently formulating a project proposal for the new extension of the existing building at the same site.

Grateful if you could assist us in acquiring relocating our land lease to enable PWD's Architect to re-adjust and finalise our building design before submission to the Board for consideration.

A handwritten signature in black ink, appearing to be 'Tia Tau', is written above the name and title.

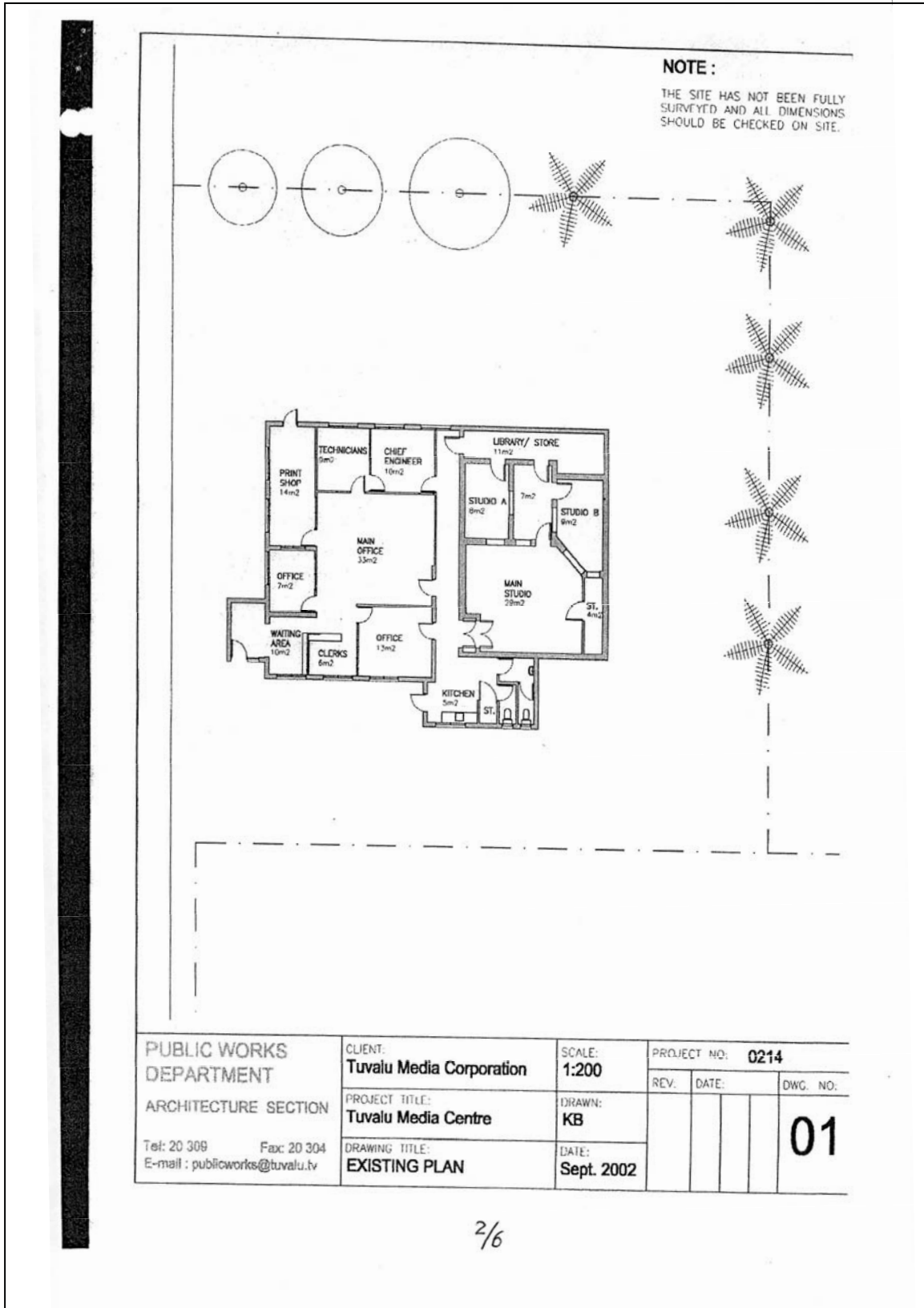
Tia Tau
General Manager

A small, handwritten mark or signature in the bottom left corner of the page.

Vaiaku, Funafuti, TUVALU tel: (688) 20731, 20138, 20139 fax: (688) 20732 e-mail: media@tuvalu.tv

1/6

2002年 TMD 新スタジオ局舎計画 (2/6)

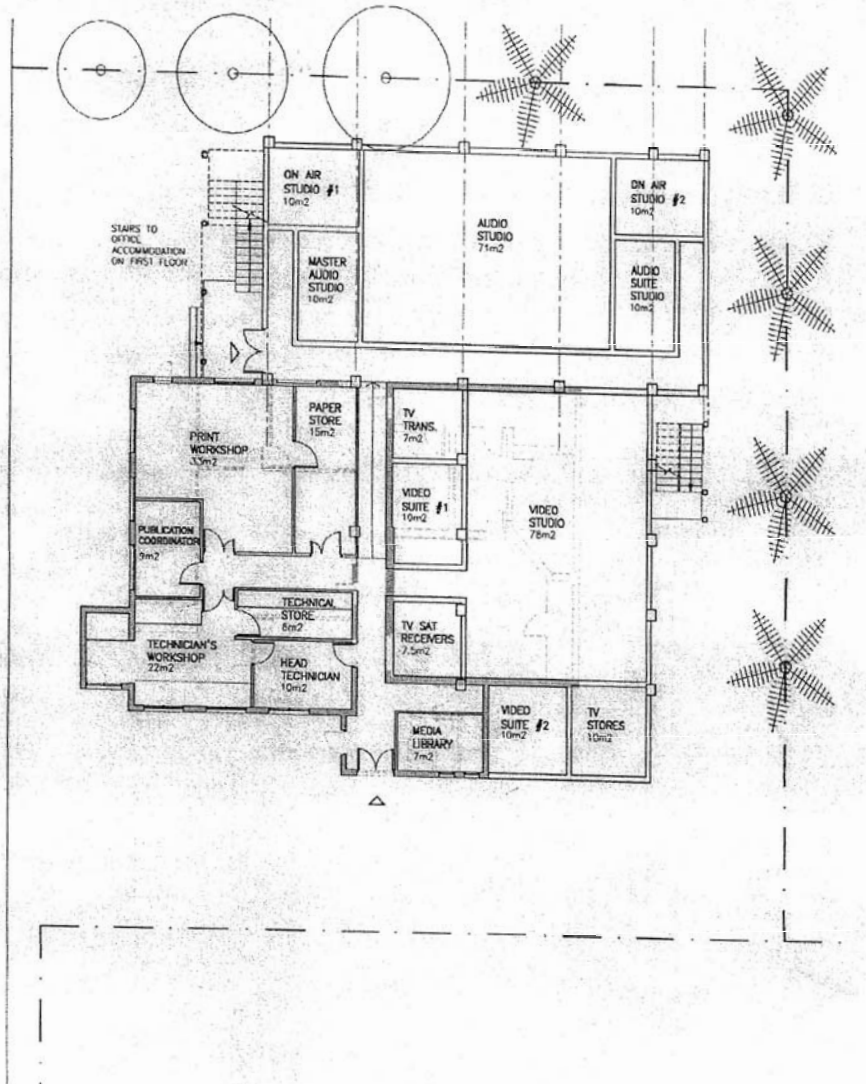


PUBLIC WORKS DEPARTMENT ARCHITECTURE SECTION Tel: 20 308 Fax: 20 304 E-mail : publicworks@tuvalu.tv	CLIENT: Tuvalu Media Corporation	SCALE: 1:200	PROJECT NO: 0214		
	PROJECT TITLE: Tuvalu Media Centre	DRAWN: KB	REV.	DATE:	DWG. NO.
	DRAWING TITLE: EXISTING PLAN	DATE: Sept. 2002			01

2002年 TMD 新スタジオ局舎計画 (3/6)

NOTE :

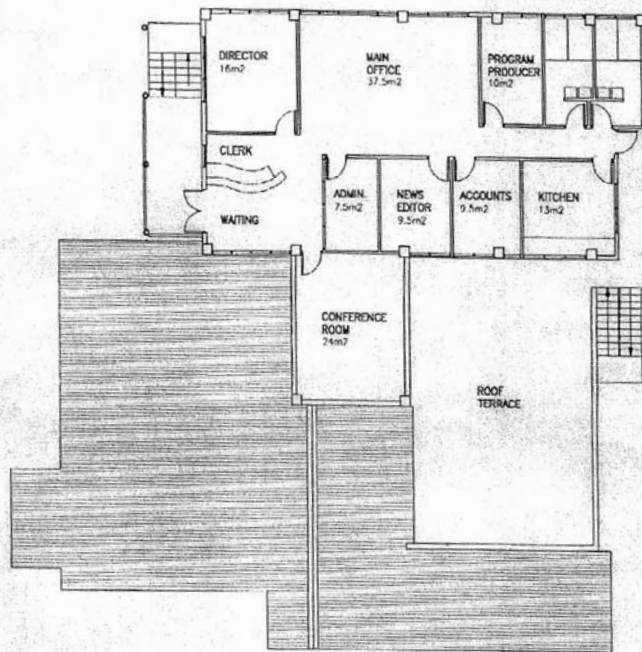
THE SITE HAS NOT BEEN FULLY SURVEYED AND ALL DIMENSIONS SHOULD BE CHECKED ON SITE.



PUBLIC WORKS DEPARTMENT ARCHITECTURE SECTION Tel: 20 309 Fax: 20 304 E-mail : publicworks@tuvalu.tv	CLIENT: Tuvalu Media Corporation	SCALE: 1:200	PROJECT NO: 0214		
	PROJECT TITLE: Tuvalu Media Centre	DRAWN: KB	REV:	DATE:	DWG. NO:
	DRAWING TITLE: PROPOSED GF PLAN	DATE: Sept. 2002			
	02				

3/6

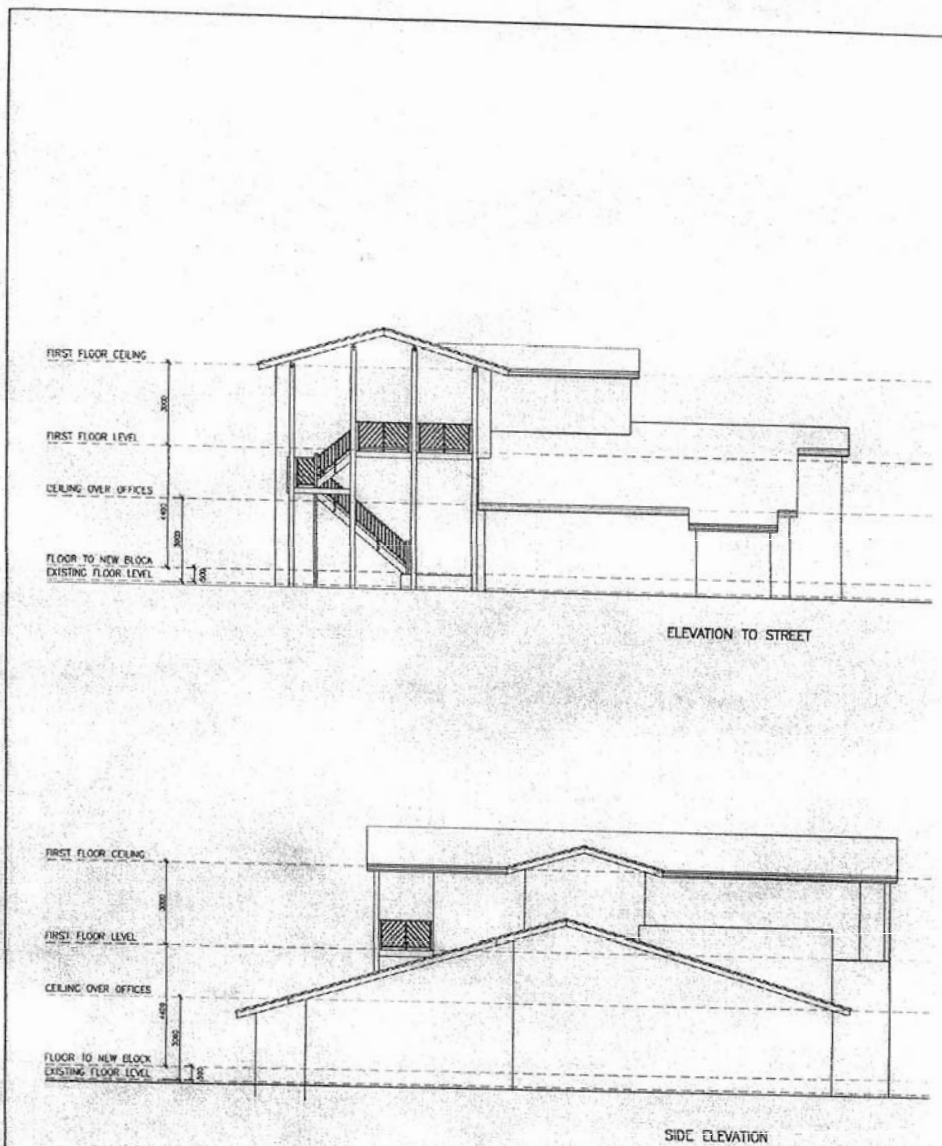
2002年 TMD 新スタジオ局舎計画 (4/6)



PUBLIC WORKS DEPARTMENT ARCHITECTURE SECTION Tel: 20 309 Fax: 20 304 E-mail : publicworks@tuvalu.tv	CLIENT: Tuvalu Media Corporation	SCALE: 1:200	PROJECT NO: 0214		
	PROJECT TITLE: Tuvalu Media Centre	DRAWN: KB	REV:	DATE:	DWG. NO:
	DRAWING TITLE: PROPOSED FF PLAN	DATE: Sept. 2002			03

4/6

2002年 TMD 新スタジオ局舎計画 (5/6)



PUBLIC WORKS DEPARTMENT ARCHITECTURE SECTION Tel: 20 309 Fax: 20 304 E-mail : publicworks@tuvalu.tv	CLIENT: Tuvalu Media Corporation	SCALE: 1:200	PROJECT NO: 0214		
	PROJECT TITLE: Tuvalu Media Centre	DRAWN: KB	REV:	DATE:	DWG. NO:
	DRAWING TITLE: PROPOSED ELEVATIONS	DATE: Sept. 2002			
					04

5/6

2002年 TMD 新スタジオ局舎計画 (6/6)

SCHEDULE OF AREAS

Tuvalu Media Centre

	Area in existing building	Area in proposed building
OFFICE ACCOMMODATION		
Waiting area		
Clerks enclosure	10.0	} 15.0
Director's office	6.0	
Admin. Assistant's office	13.0	16.0
Accountant's office		7.5
News Editor's Office		9.5
Main Office (open plan)	33.0	9.5
Program producer's office		37.5
Publications coordinator's office		10.0
Head of Technical service's office	7.0	9.0
Conference room	10.0	10.0
Total office accommodation	79.0	148.0
WORKSHOP ACCOMMODATION		
Technician's workshop		
Technical storage areas	9.0	22.0
Print shop		8.0
Paper store	14.0	33.0
Media Library		15.0
Total workshop accommodation	34.0	85.0
STUDIO ACCOMMODATION		
Video studio (medium)		
Video control suite 1	29.0	78.0
Video control suite 2	7.0	10.0
TV transmitters		10.0
TV / sat. receivers		7.0
Video prop store		7.5
Audio studio (medium)	4.0	10.0
Master audio studio		71.0
On air studio 1	9.0	10 36.0
On air studio 2	8.0	10 26.0
Audio suite studio		10 20.0
Total studio accommodation	28.0	233.5 200.5
ANCILARY ACCOMMODATION		
Staff kitchen/ store		
Staff WCs	6.0	13.0
	6.0	15.0
Total accommodation	153.0	494.5 461.5
Circulation, internal partitions, etc. (assume 15% of accommodation area for new building)	42.0	74.2 69.2
BUILDING AREA TOTAL (m²)	195.0	568.7 530.7
Rate per m ² (A\$)		\$900.00
Estimate of building construction cost		\$477,652.50

511,830

PUBLIC WORKS DEPARTMENT
Ministry of Works, Communication Transport

Page 1 of 1
Date: 30/09/2002

6/6

添付資料9 気象関連データ

気象関連データ

Gust (瞬間風速)

気象庁-1

(knot)

2007	1	1	41
2007	1	2	16
2007	1	3	17
2007	1	4	18
2007	1	5	24
2007	1	6	25
2007	1	7	25
2007	1	8	14
2007	1	9	19
2007	1	10	21
2007	1	11	18
2007	1	12	15
2007	1	13	21
2007	1	14	26
2007	1	15	21
2007	1	16	14
2007	1	17	23
2007	1	18	38
2007	1	19	39
2007	1	20	39
2007	1	21	19
2007	1	22	31
2007	1	23	30
2007	1	24	22
2007	1	25	32
2007	1	26	42
2007	1	27	15
2007	1	28	22
2007	1	29	15
2007	1	30	15
2007	1	31	20
2007	2	1	18
2007	2	2	24
2007	2	3	28
2007	2	4	31
2007	2	5	18
2007	2	6	21
2007	2	7	12
2007	2	8	19
2007	2	9	10
2007	2	10	16
2007	2	11	14
2007	2	12	17
2007	2	13	10
2007	2	14	10
2007	2	15	15
2007	2	16	12
2007	2	17	18
2007	2	18	25
2007	2	19	26
2007	2	20	25
2007	2	21	18
2007	2	22	20
2007	2	23	24
2007	2	24	21

Daily mean wind speed (風速の平均)

気象庁-2

Station_ID	Station_Na	Element_C	Element_Nyy	(年)		(日) (knot)	
				mm	dd	obs_val	
J91643	Funafuti	58	PKGUST	2005	10	1	3
J91643	Funafuti	58	PKGUST	2005	10	2	2
J91643	Funafuti	58	PKGUST	2005	10	3	6
J91643	Funafuti	58	PKGUST	2005	10	4	2
J91643	Funafuti	58	PKGUST	2005	10	5	6
J91643	Funafuti	58	PKGUST	2005	10	6	5
J91643	Funafuti	58	PKGUST	2005	10	7	5
J91643	Funafuti	58	PKGUST	2005	10	8	7
J91643	Funafuti	58	PKGUST	2005	10	9	16
J91643	Funafuti	58	PKGUST	2005	10	10	19
J91643	Funafuti	58	PKGUST	2005	10	11	11
J91643	Funafuti	58	PKGUST	2005	10	12	13
J91643	Funafuti	58	PKGUST	2005	10	13	6
J91643	Funafuti	58	PKGUST	2005	10	14	5
J91643	Funafuti	58	PKGUST	2005	10	15	4
J91643	Funafuti	58	PKGUST	2005	10	16	2
J91643	Funafuti	58	PKGUST	2005	10	17	5
J91643	Funafuti	58	PKGUST	2005	10	18	4
J91643	Funafuti	58	PKGUST	2005	10	19	5
J91643	Funafuti	58	PKGUST	2005	10	20	10
J91643	Funafuti	58	PKGUST	2005	10	21	8
J91643	Funafuti	58	PKGUST	2005	10	22	5
J91643	Funafuti	58	PKGUST	2005	10	23	5
J91643	Funafuti	58	PKGUST	2005	10	24	5
J91643	Funafuti	58	PKGUST	2005	10	25	6
J91643	Funafuti	58	PKGUST	2005	10	26	5
J91643	Funafuti	58	PKGUST	2005	10	27	2
J91643	Funafuti	58	PKGUST	2005	10	28	5
J91643	Funafuti	58	PKGUST	2005	10	29	4
J91643	Funafuti	58	PKGUST	2005	10	30	0
J91643	Funafuti	58	PKGUST	2005	10	31	4
J91643	Funafuti	58	PKGUST	2005	3	1	17
J91643	Funafuti	58	PKGUST	2005	3	2	17
J91643	Funafuti	58	PKGUST	2005	3	3	18
J91643	Funafuti	58	PKGUST	2005	3	4	15
J91643	Funafuti	58	PKGUST	2005	3	5	24
J91643	Funafuti	58	PKGUST	2005	3	6	16
J91643	Funafuti	58	PKGUST	2005	3	7	2
J91643	Funafuti	58	PKGUST	2005	3	8	0
J91643	Funafuti	58	PKGUST	2005	3	9	4
J91643	Funafuti	58	PKGUST	2005	3	10	6
J91643	Funafuti	58	PKGUST	2005	3	11	4
J91643	Funafuti	58	PKGUST	2005	3	12	2
J91643	Funafuti	58	PKGUST	2005	3	13	8
J91643	Funafuti	58	PKGUST	2005	3	14	5
J91643	Funafuti	58	PKGUST	2005	3	15	2
J91643	Funafuti	58	PKGUST	2005	3	16	2
J91643	Funafuti	58	PKGUST	2005	3	17	5
J91643	Funafuti	58	PKGUST	2005	3	18	4
J91643	Funafuti	58	PKGUST	2005	3	19	4
J91643	Funafuti	58	PKGUST	2005	3	20	8
J91643	Funafuti	58	PKGUST	2005	3	21	8

Daily mean wind speed (風速の平均)

気象庁-3

Station_ID	station	Element_C	element	Year	Month	(knot) daily_mean
J91643	Funafuti	58	PKGUST	Jan-97	1	7.774194
J91643	Funafuti	58	PKGUST	Feb-97	2	10.08333
J91643	Funafuti	58	PKGUST	Mar-97	3	10.41379
J91643	Funafuti	58	PKGUST	Apr-97	4	7.928571
J91643	Funafuti	58	PKGUST	May-97	5	10.86667
J91643	Funafuti	58	PKGUST	Jun-97	6	11.76923
J91643	Funafuti	58	PKGUST	Jul-97	7	12.90909
J91643	Funafuti	58	PKGUST	Aug-97	8	8.857143
J91643	Funafuti	58	PKGUST	Sep-97	9	12.33333
J91643	Funafuti	58	PKGUST	Oct-97	10	10.875
J91643	Funafuti	58	PKGUST	Nov-97	11	8.647059
J91643	Funafuti	58	PKGUST	Dec-97	12	10.82353
J91643	Funafuti	58	PKGUST	Jan-98	1	13
J91643	Funafuti	58	PKGUST	Feb-98	2	7.777778
J91643	Funafuti	58	PKGUST	Mar-98	3	8.583333
J91643	Funafuti	58	PKGUST	Apr-98	4	7.444444
J91643	Funafuti	58	PKGUST	May-98	5	14.85714
J91643	Funafuti	58	PKGUST	Jun-98	6	13.37037
J91643	Funafuti	58	PKGUST	Jul-98	7	15.2069
J91643	Funafuti	58	PKGUST	Aug-98	8	13.96429
J91643	Funafuti	58	PKGUST	Sep-98	9	13.56
J91643	Funafuti	58	PKGUST	Oct-98	10	9.190476
J91643	Funafuti	58	PKGUST	Nov-98	11	7.65
J91643	Funafuti	58	PKGUST	Dec-98	12	9.703704
J91643	Funafuti	58	PKGUST	Jan-99	1	10.59259
J91643	Funafuti	58	PKGUST	Feb-99	2	10.20833
J91643	Funafuti	58	PKGUST	Mar-99	3	8.357143
J91643	Funafuti	58	PKGUST	Apr-99	4	6.068966
J91643	Funafuti	58	PKGUST	May-99	5	7.333333
J91643	Funafuti	58	PKGUST	Jun-99	6	7.391304
J91643	Funafuti	58	PKGUST	Jul-99	7	13.55172

TIDE PREDICTIONS FOR TUVALU - FUNAFUTI

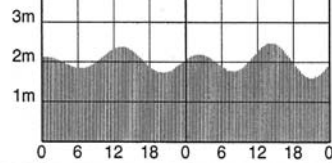
FEBRUARY - 2008

LOCAL STANDARD TIME

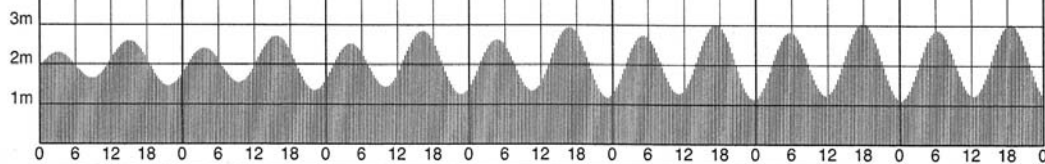
Tide gauge zero is 4.0123 metres below BM22

SUNDAY MONDAY TUESDAY WEDNESDAY THURSDAY FRIDAY SATURDAY

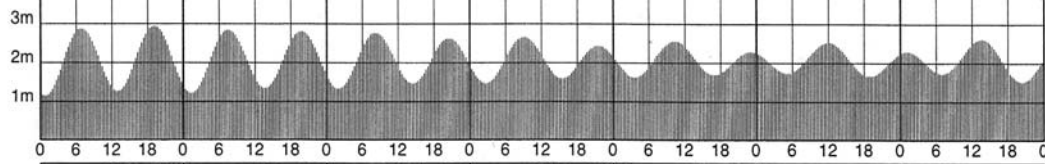
1	0045 2.12	2	0215 2.19
	0632 1.84		0753 1.77
	1319 2.37		1419 2.47
	2011 1.73		2100 1.60



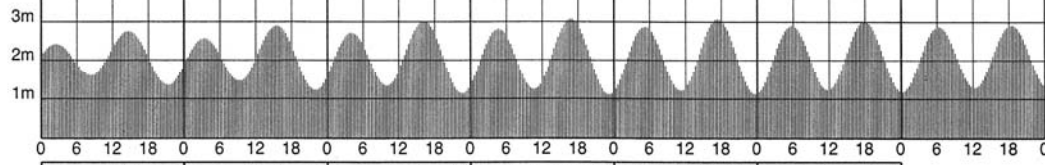
3	0303 2.29	4	0339 2.41	5	0410 2.52	6	0440 2.63	7	0511 2.74	8	0542 2.82	9	0011 1.11
	0845 1.66		0924 1.55		0959 1.44		1031 1.35		1105 1.27		1141 1.23		0615 2.87
	1503 2.59		1540 2.72		1614 2.84		1646 2.94		1719 3.01		1753 3.05		1217 1.22
	2136 1.47		2207 1.35		2238 1.25		2308 1.18		2339 1.13				1828 3.02



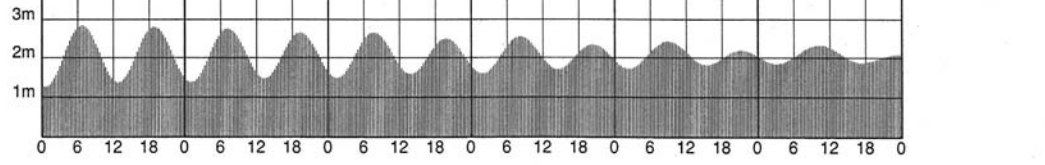
10	0045 1.14	11	0120 1.21	12	0159 1.32	13	0242 1.47	14	0339 1.62	15	0507 1.73	16	0108 2.29
	0651 2.88		0729 2.84		0812 2.76		0904 2.65		1017 2.55		1200 2.52		0659 1.72
	1256 1.26		1338 1.34		1426 1.46		1527 1.59		1658 1.69		1856 1.66		1333 2.61
	1904 2.94		1945 2.80		2030 2.63		2130 2.43		2308 2.28				2021 1.51



17	0230 2.41	18	0322 2.56	19	0404 2.70	20	0440 2.81	21	0514 2.87	22	0545 2.89	23	0010 1.17
	0818 1.60		0913 1.45		0957 1.33		1035 1.24		1112 1.21		1145 1.22		0615 2.87
	1440 2.75		1530 2.90		1612 3.01		1649 3.06		1723 3.06		1755 3.01		1216 1.28
	2115 1.35		2159 1.22		2235 1.13		2309 1.10		2341 1.12				1824 2.91



24	0037 1.26	25	0102 1.37	26	0127 1.48	27	0153 1.60	28	0223 1.72	29	0310 1.84
	0643 2.82		0710 2.74		0739 2.64		0811 2.53		0855 2.41		1015 2.31
	1247 1.36		1317 1.47		1350 1.58		1429 1.70		1525 1.81		1724 1.87
	1851 2.78		1918 2.64		1947 2.49		2020 2.33		2114 2.18		2334 2.08



© Copyright: Commonwealth of Australia 2006, Bureau of Meteorology (ABN 92 637 533 532)

Disclaimer: These tide predictions are supplied in good faith and believed to be correct.

No warranty is given in respect to errors, omissions, or suitability for any purpose.

添付資料 10 収集資料リスト

収集資料リスト

番号	名称	形態 図書・ビデオ 地図・写真等	オリジナル・コピー	発行機関	発行年
1	Tuvalu Telecommunications Corporation Budget 2007	図書	コピー	Tuvalu Telecommunications Corporation	Dec. 2006
2	Tuvalu Human Resources	図書	コピー	Secretary of Personnel, Office of Prime Minister	2007
3	Tuvalu Media Budget 2008	図書	コピー	Tuvalu Media Department	Jan. 2008
4	Tropical Cyclone Alerts and Warnings	図書	コピー	Fiji Meteorological Service	Dec. 2007
5	Tropical Cyclone Operation Plan	図書	コピー	Fiji Meteorological Service	2006
6	Approximate Tracks of Tropical Cyclones Affecting Fiji	図書	コピー	Fiji Meteorological Service	2007
7	南太平洋気象観測ポイント	図書	コピー	Fiji Meteorological Service	2007
8	ツバル国地図	写真(CD)	コピー	Tuvalu Land Department	May 2008