Eighteen Months to Reply.

CARDS received recently are from: S.W.: COBZ, XEBT, OLR3A, OLR5A, KZRM. EAJ8 (also sent a photograph of General Franco). JZJ. and Radio Algiers, who would like reports; broadcast: XENT, 5DN, 2GN, 4SB, 7DY, 3HA.

Recent loggings are: COCA, COCX, COCU, HIT, YVIRH, EAQ, JIB-JFAK.

My report to EAJ8 was away 18 months, KZRM, 10 months, VPB nine weeks.—"Dismal Desmond" (Christchurch).

Reports and Loggings.

PEPORTS out: NZ, 4YZ, 2YB; Australia, 2LM, 2AY, 2GZ, 2NZ, 2FC, 2KO, 2LF, 3LK, 3HA, 3GI, 3SR, 4SE, 4QR, 5PI, 7LA, 7HT; Mexico, XENT; U.S.A., KFBK, WBT, WMAQ; 20 m., CESBH, TI2AV, 11H2X, PKIZZ, KTFBE, WSANH, W7BVO: S.W., LRY 2RO, FAO LRX, 2RO, EAQ,

Cards to hand are from: B.C., KGU, 2LM, 2GZ, 2AY, 2NZ, 2FC, 3LK, 4SB, 4QR, 5PI, 7LA, 4YZ, 2YB; S.W., LU1DJ, VE3NB, F3KII, CX3BL, W2IXY, VK2ME, DJN, TPA4.—"CQ DX" (Wellington).

International Tone Code.

RECENTLY received a card from W4EEB, an American "ham," and on it he stated that when reporting "hams" the international reporting system for tone should be used, which is as follows: --

ORI 1. Extremely rough hissing note. 2. Very rough A.C. note-no trace of musicality.

N.Z. DX Club Meetings.

HAWKE'S BAY

In the Club Room, above Wood's Tearcoms, Waipukurau, at 7.45 p.m., on Wednesday, June 1,

V. L. KING (119H.B.),

Branch Secretary.

NORTHLAND.

At 21 Anzae Road, Whangarei, at 7.30 p.m., on Monday, June 6.

R. A. ROYCROFT (2HQ), Branch Secretary.

AUCKLAND.

In the Society of Arts Hall, Kitchener Street, at 8 p.m., on Wednesday, June I.

F. NEWING (316A), Branch Secretary.

WELLINGTON.

In the "Times" Building Kelburn Avenue, at 8 p.m., on Monday, June 13. Members are asked to meet at the bottom of Kelburn Avenue (off Lambton Quay).

A. BAILEY (114W), Branch Secretary.

WANGANUE.

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At 21 Lowther Street, at 8 p.m. on Thursday, June 16, F. CARR (150W.), Branch Secretary.

WAIKATO.

WAINATO.

The Annual Meeting of the Waikato Branch will be held in Morrinsville on Saturday, July 16. A good attendance is requested,
GORDON BRHERLY (4HA.),
Branch Secretary.

WESTLAND.

The Annual Meeting of the West-land Branch will be held in the Methodist Hall, Sewell Street, Hoti-tika, at 8 p.m., on Thursday, June 2. A cordial invitation is extended to all members and intending members to be present. W. A. REYNOLDS (34Wd.), Branch Secretary.

- 3. Rough low-pitched A.C. noteslightly musical.
- 4. Rather rough A.C. note-moderately musical.
 - 5. Musically modulated note.
- 6. Modulated note-slight trace of whistle.
 - 7. Near D.C. note-smooth ripple.
- 8. Good D.C. note-just trace of ripple.
 - 9. Purest D.C. note.

If the note appears to be crystal controlled simply add an "X" after the appropriate number.

If any dxers requiring the QRA's of shortwave or amateur stations send me a stamped addressed envelope with their query, I will only be too pleased to forward the desired information.—"Mudlark" (Greytown).

Questions and Answers

"R.J.B." (Hawera): The effect of darkness and daylight on radio signals, in their travel through the upper atmosphere, is a rather long subject, but a brief explanation is given here.

The waves travel in straight lines. unless something deflects them from their normal paths. This means that they would take the shortest path from the transmitter to the receiver. Those waves which travel in a more or less horizontal direction are absorbed by an amount which depends on the quency of the waves themselves, upon the nature of the ground they travel over and, the nature of the obstacles they encounter. Hence at great distances from the transmitter these 'ground" waves as they are called are practically non-existent.

In the upper portions of our atmosphere there are regions of low atmos-pheric pressure where the sun's rays have the opportunity to change the electrical state of the air particles. This process is known as "ionising" and ionised air has different properties, as far as the travel of waves through it is concerned, to that of normal air. If the waves at a boundary, between ionised and normal air, arrive at an acute angle, they will be reflected from the boundary at a similar angle to their arrival. Hence these return to earth again but. naturally, at some distance away. They may even be reflected so that they hit this reflecting layer further on and, be again reflected before reaching the earth. Thus by one or more "hops" they can reach round the earth.

Such reflecting layers cannot remain constant in their amount of ionisa-tion nor in their height above the earth, as there are many factors which alter these two characteristics. During the period of greatest sunshine, the layers, for there are more than one, may be very reflecting but so low that the waves are returned to earth very quickly. Again these layers also absorb, so that the reflected wave may be weak.

At night the conditions are more stable and the reflection takes place more regularly and, further, the layers are usually high so that strong signals can be obtained on the other side of the earth.

The effect of frequency complicates matters further so that at certain times of the day and night we find certain bands of frequencies are received, while others are "dead."

On The Shortwaves

(Continued from page 63.)

VLR, Melbourne

Wavelength, 31.34 m.

HIGHT.IGHTS

Sunday, June 5.

10.20 p.m.: The New Note Octet. 11.20: Recent film release.

Monday, June 6.

9.30 p.m.: Radio Serial—"Into the Light." 10.0: "At the Sign of the Malson Rouge." 10.30: "Opical Revue. 11.0: "The History of Jazz."

Tuesday, June 7.

9.30 p.m.; Everyman's Music. 10.30: Presentation-"Prince Claf." 11.15: Topical Talk. 11.30: "We Present." Organ recital.

Wednesday, June. 8.

9.30 p.m.: Half hour of items chosen by listeners.
10.16: "Emma and 'Erbert."
10.30: National Military Band.

Thursday, June 9.

9.30 p.m.: "The Play's the Thing." 10.45: A.B.C. (Melbourne) Concert Orchestra. 11.15: "Chorus, Geutlemen, Please!" 11.30: Talk on World Affairs.

Friday, June 10.

9.30 p.m. to 5.0 a.m.: National programme, including descriptions of First Test Cricket Match—Australia v. England, at Trent Bridge, England.

Saturday, June 11.

9.40 p.m. to 5.0 a.m.: National programme, including descriptions of First Test Cricket Match—Australia v. England, at Trent Bridge, England.

JUNE, 1938.

VK2ME, Sydney

Wavelength: 31.28 m.

Sundays: 4.30-6.30 p.m., 9.30 p.m.-1.30 a.m. Mondays: 4.0-6.30 a.m.

VK3ME, Melbourne

Wavelength: 31.5 m.

Monday to Saturday (inclusive): 8.30-11.30

VK6ME, Perth

Wavelength: 31.28 m.

Monday to Saturday (inclusive): p.m.-12.30 a.m. 10.30

W2XAF, New York Wavelength: 31.48 m.

8.30 a.m.-5.30 p.m.: General Broadcast. For Africa, Australia and Far East.

W9XF, Chicago Wavelength: 49.15 m.

12.30-1.40 p.m., 4.35-6.30 p.m. 5.5 p.m.-7.0 p.m.

W8XAL, Cincinnatti

Wavelength: 49.48 m. Daily: 3,30-6,30 p.m., 11 p.m.-12.30 a.m.

W3XAU, Philadelphia

Wavelength: 31.26 m. Wednesday, Thursday, Friday: Monday. 4.30-11.30 a.m. Other days: Till 12 noon.



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