

1) Site T-104

Cut-down of trees and leveling of land will be needed.

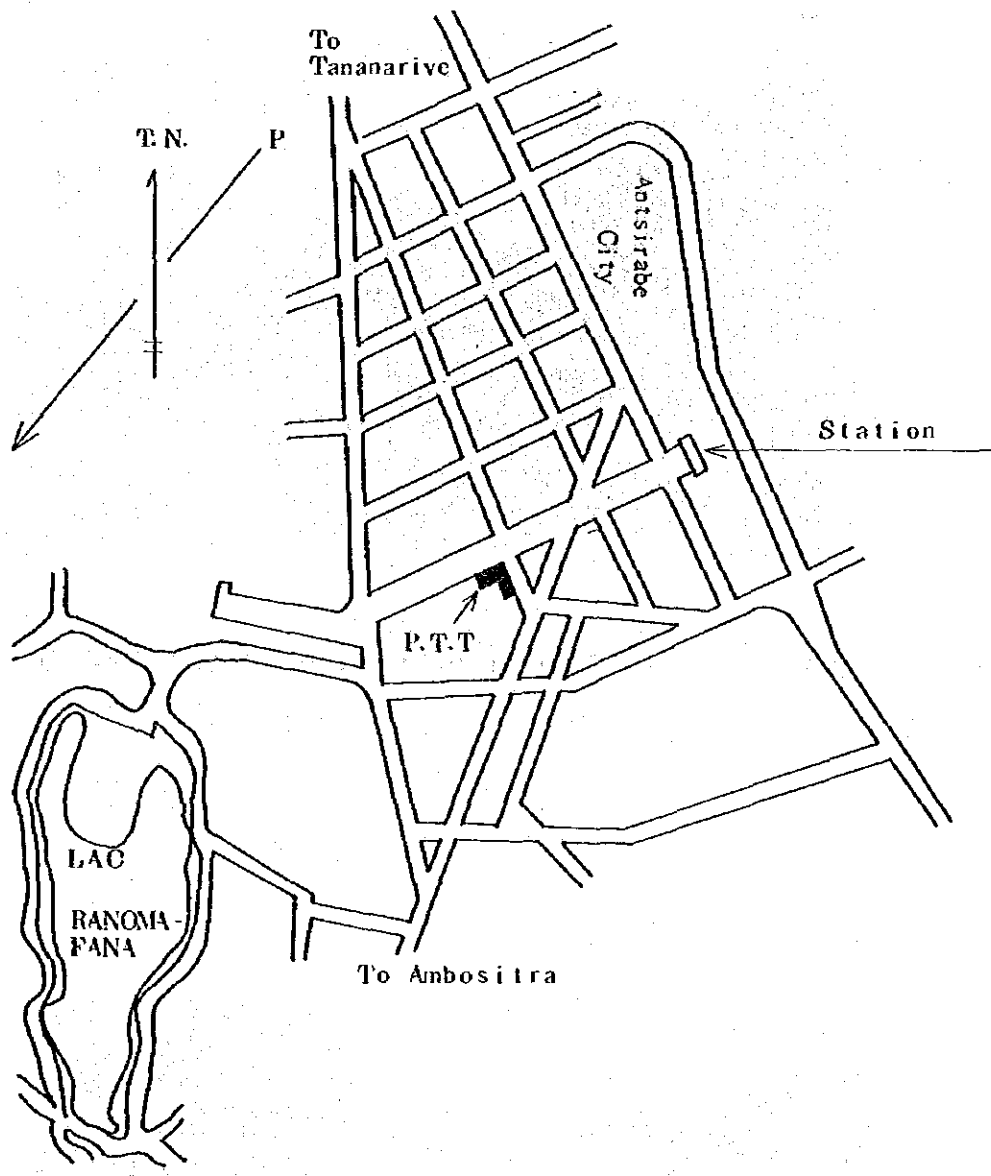
2) Access Road

Existing up to the proposed site.

3) Entrance

From T-104 to PTT building in Antsirabe city, cable route will be set.

Attached DWG. 4-1-16 Guide Map of T-104 (Ivohitra)



1) Site T-105

Under construction.

2) Access Road

Nil.

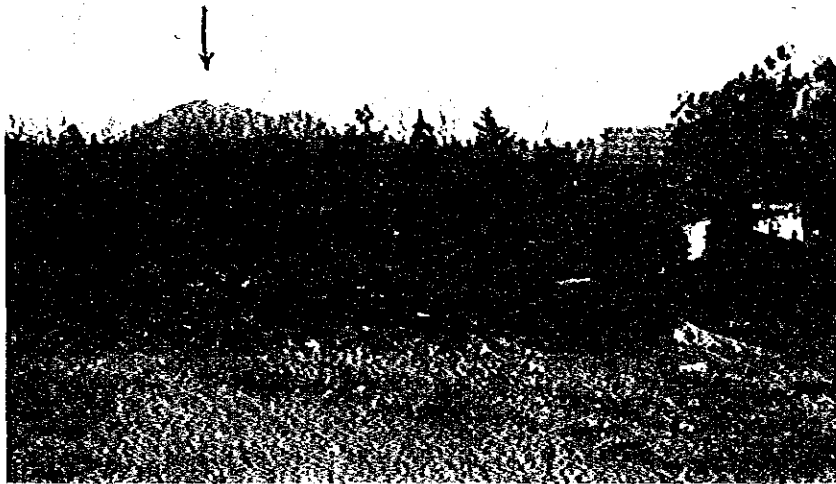
Attached DWG. 4-1-17 Guide Map of T-105 (Antsirabe)



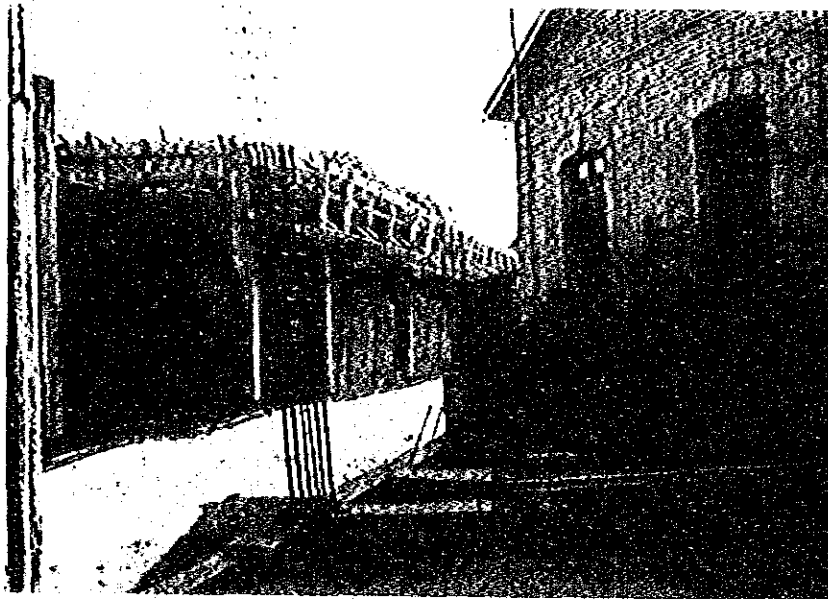
Attached DWG. 4-1-18 A Distant View of R-102 (Ambohimandraso)
from T-104 (Ivohitra)



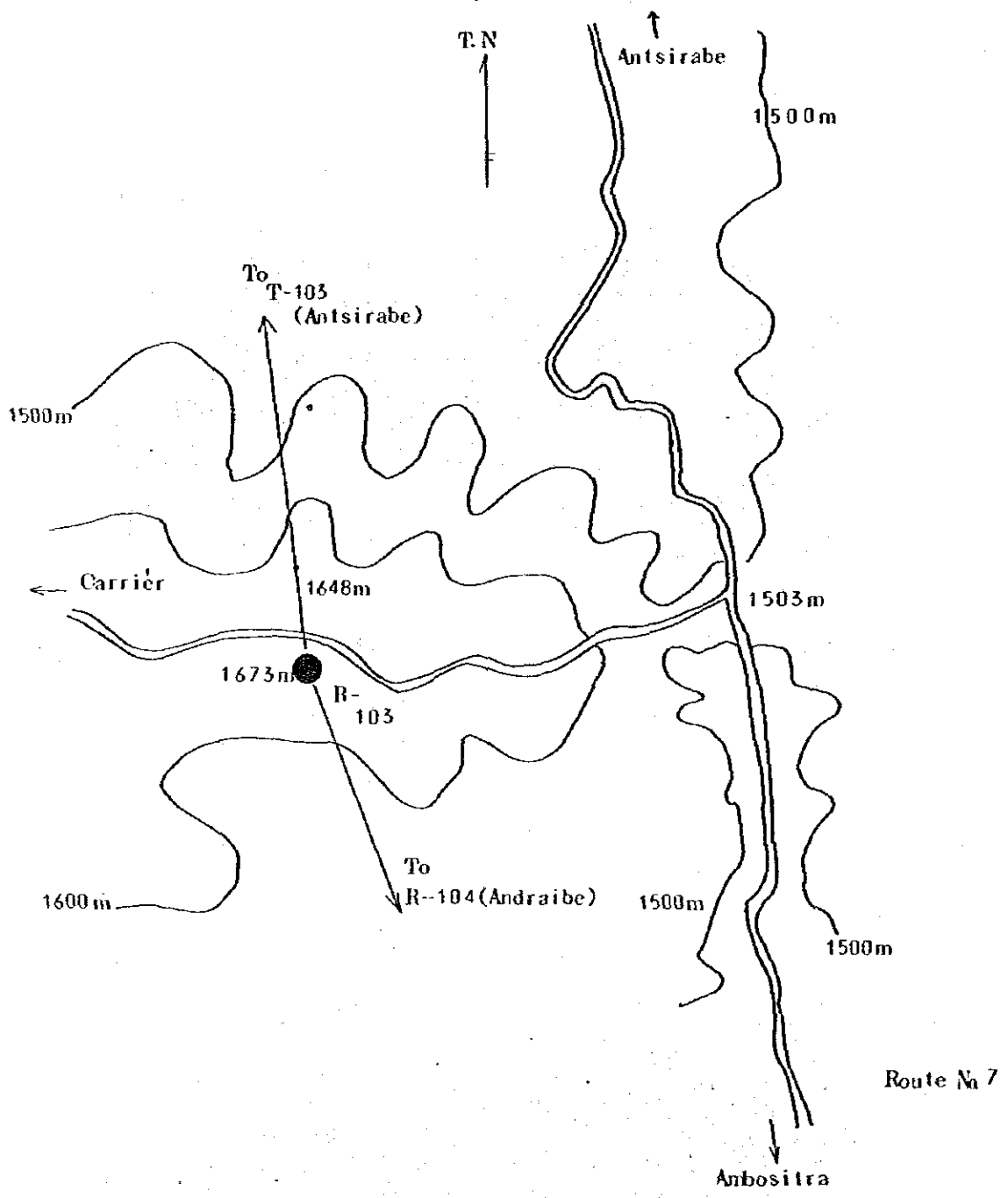
Attached DWG. 4-1-19 A Distant View of R-103 (Bezaika)
from T-104 (Ivohitra)



Attached DWG. 4-1-20 A Distant View of T-104 (Ivohitra)
from Suburbs of Antsirabe City



Attached DWG. 4-1-21 T-105 (Antsirabe) Station under
Construction



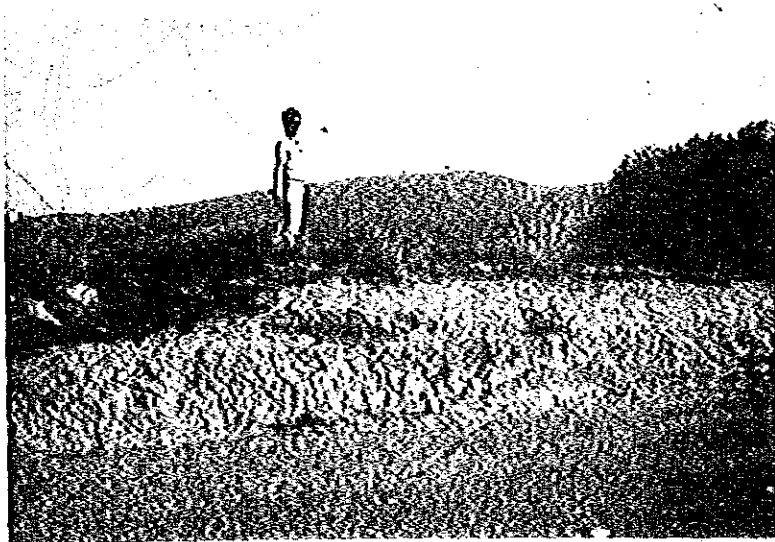
1) Site R-103

Small herb grows now.

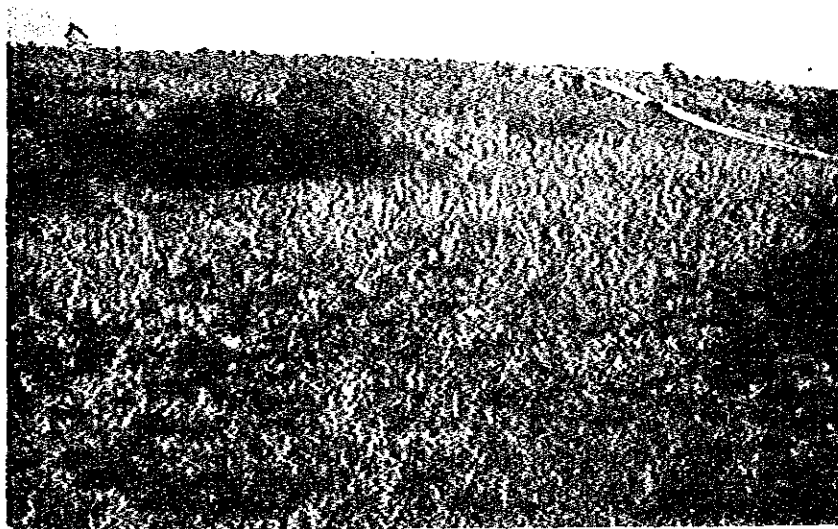
2) Access Road

About 50 m

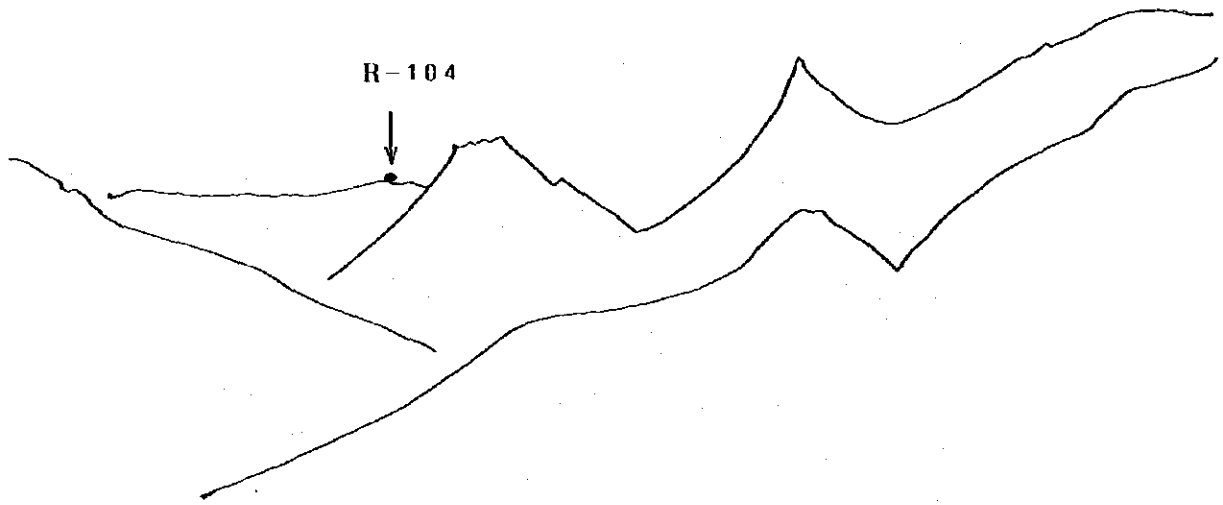
Attached DWG. 4-1-22 Guide Map of R-103 (Bezaika)



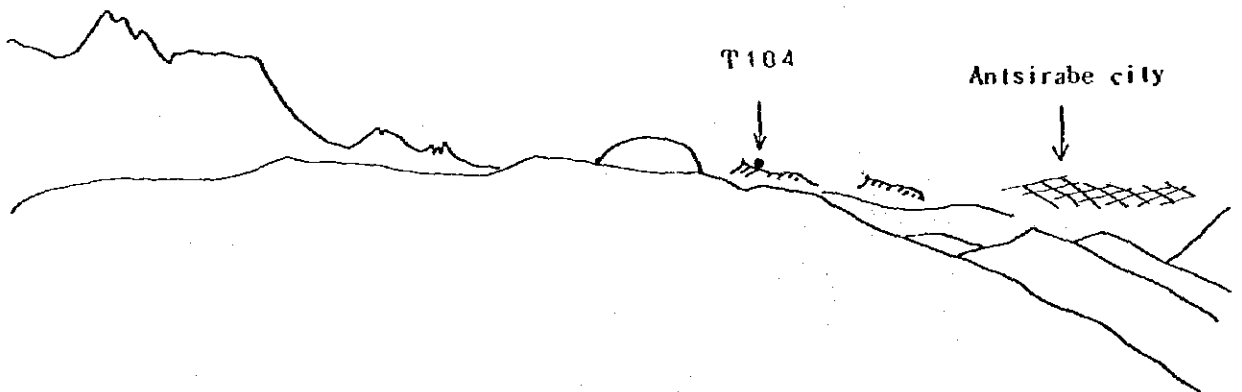
Attached DWG. 4-1-23 A Distant View of R-103 (Bezaika)
on the Way to R-103 from No.7
National Road



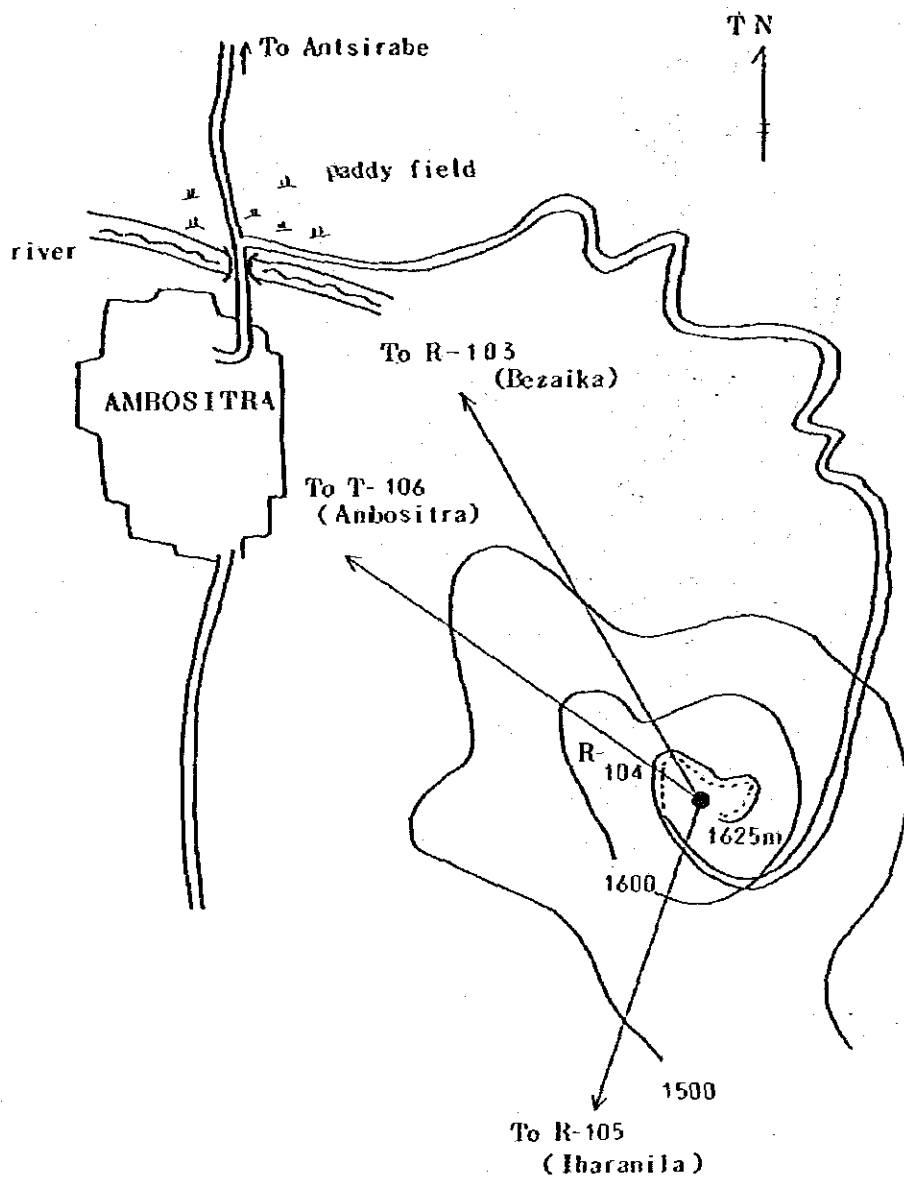
Attached DWG. 4-1-24 Site Snap of R-103 (Bezaika)
Existing road to a mine is passing by.



Attached DWG. 4-1-25 A Distant View of R-104 (Andraibe)
from R-103 (Bezaika)



Attached DWG. 4-1-26 A Distant View of T-104 (Ivohitra)
from R-103 (Bezaika)



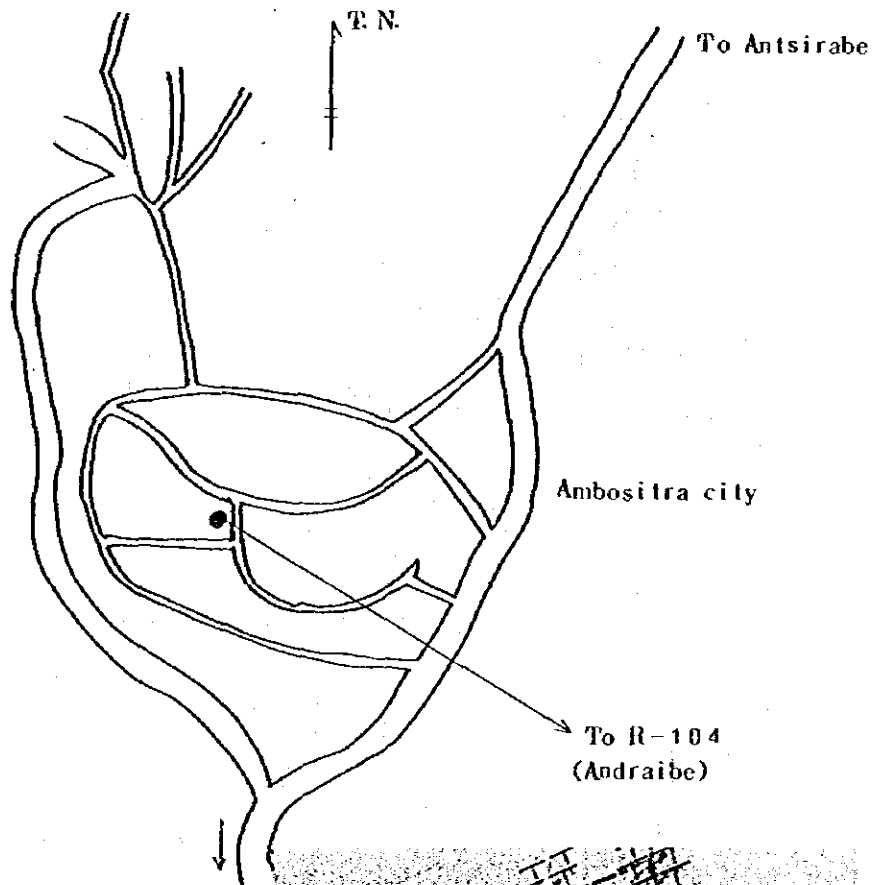
1) Site R-104

Trees surrounding proposed site in the direction of R-105 should be cut.

2) Access Road

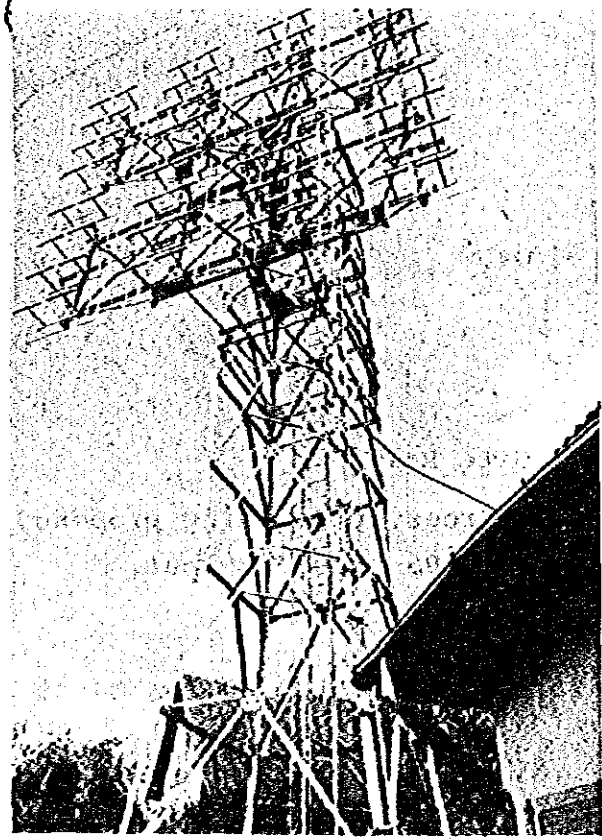
Near the top of the mountain, slight correction will be necessary (1 km).

Attached DWG. 4-1-27 Guide Map of R-104 (Andraibe)

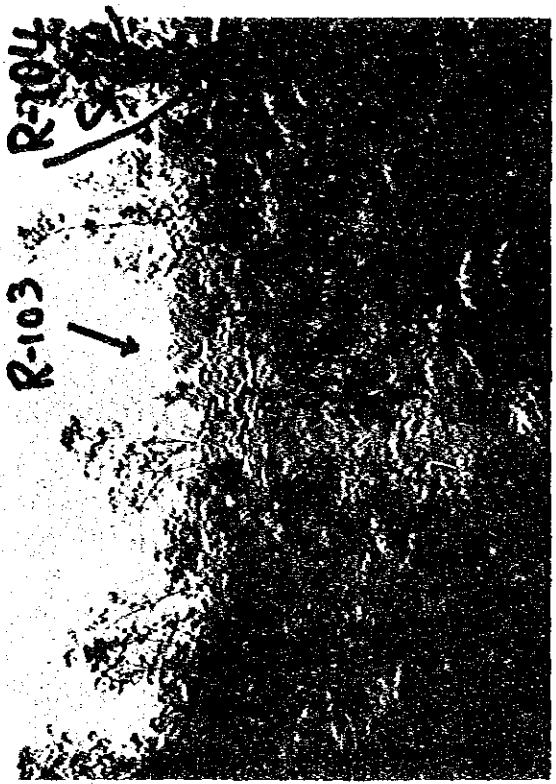
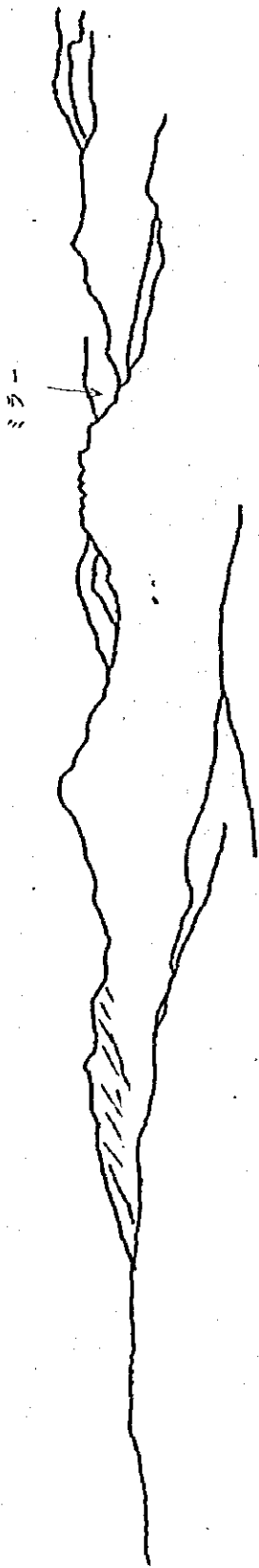


- 1) Site T-106
Existing
- 2) Access Road
Nil.

Attached DWG. 4-1-28
 Guide Map of
 T-106 (Ambositra)



Attached DWG. 4-1-29 Existing Ambositra
 Radio Station



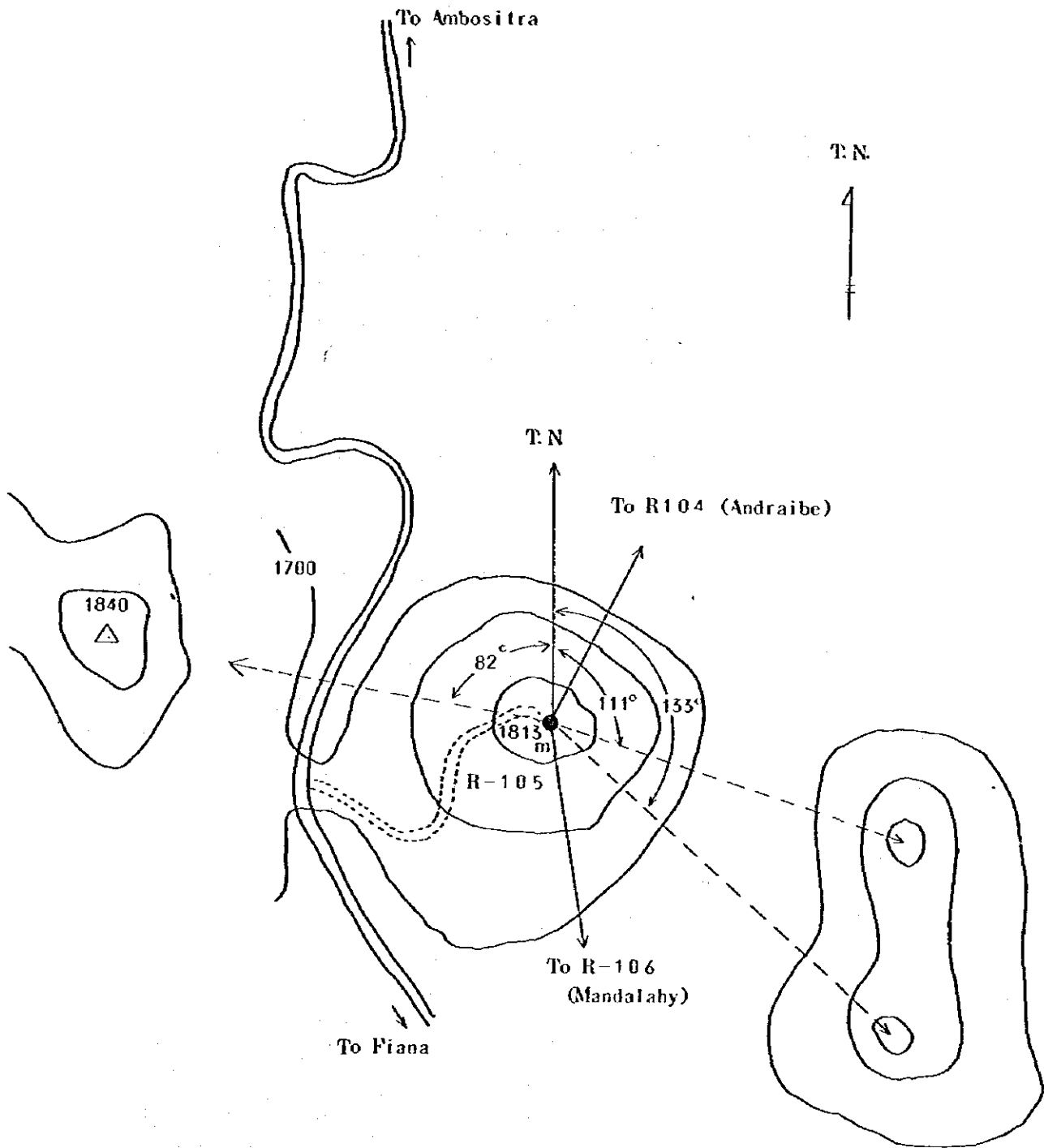
Ambositra city

Attached DWG. 4-1-30 A Distant View of R-103 (Bezaika) from R-104 (Andraibe)

R-105 (Not visible)



Attached DWG. 4-1-31 A Distant View of R-105 (Iharanila) from R-104 (Andraibe)



1) Site R-105

Almost no forest.

2) Access Road

The road to be constructed newly will be 1.5 km long.

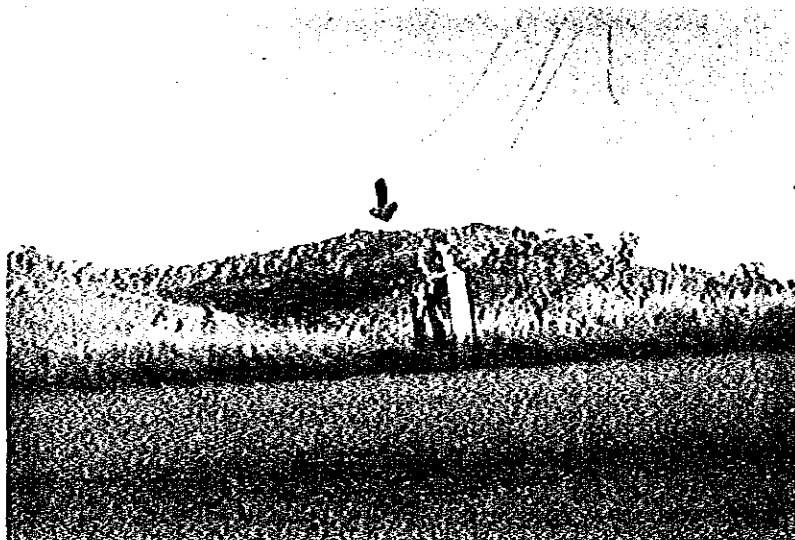
3) Note

The 1/100,000 map published in 1966 may be slightly different from actual topographic features.

Attached DWG. 4-1-32 Guide Map of R-105 (Iharanila)

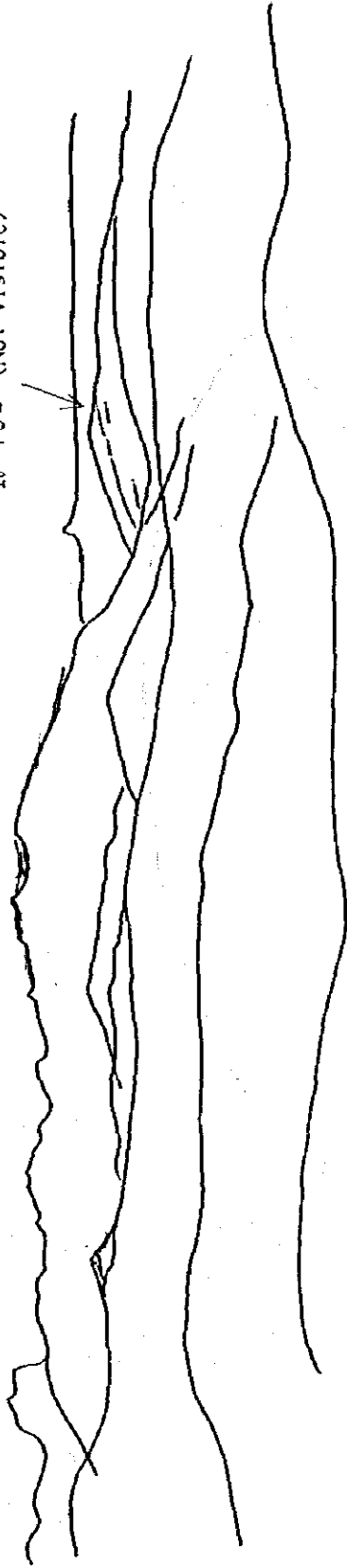


Attached DWG. 4-1-33 Site Snap of R-105 (Iharanila)

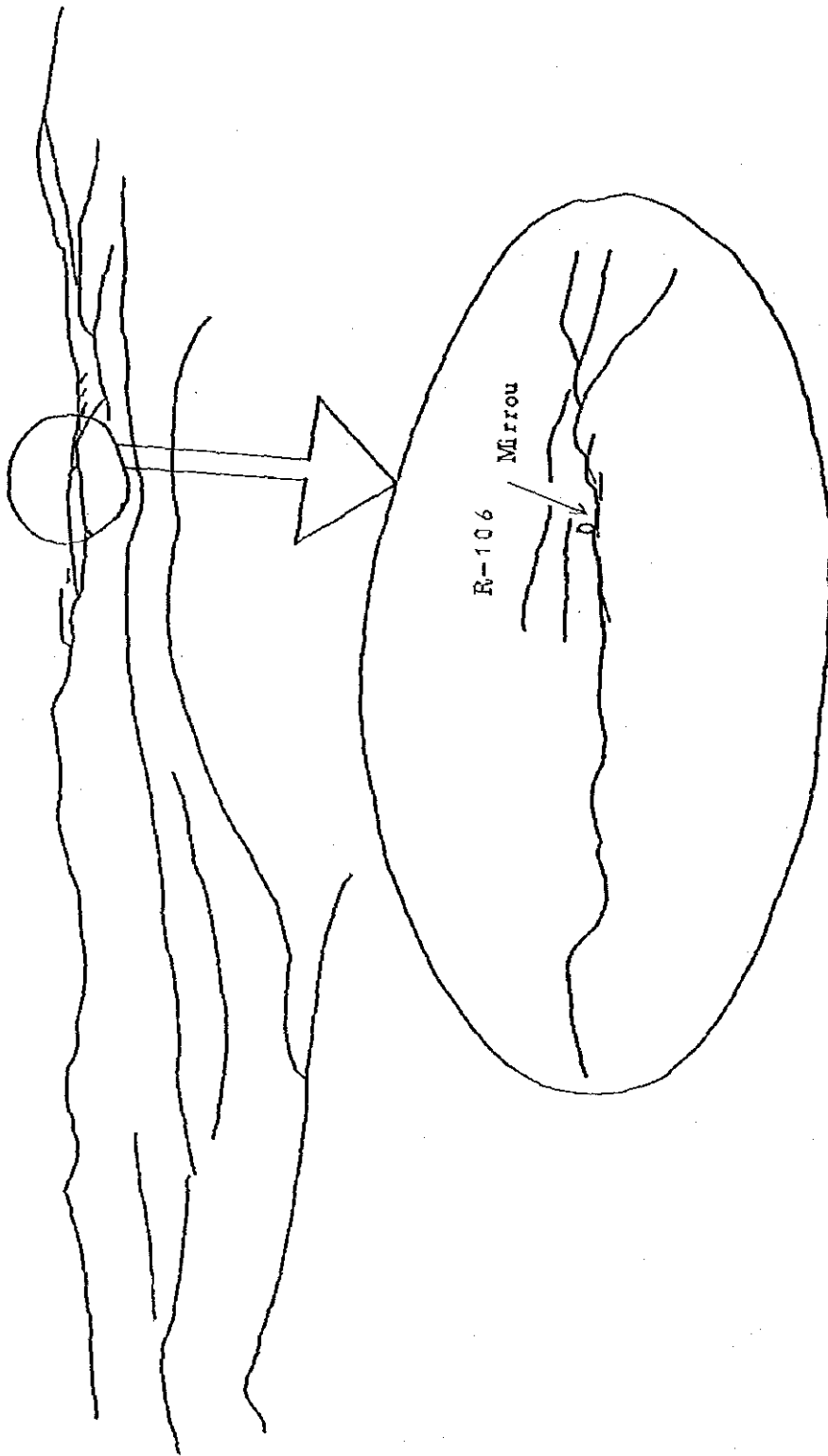


Attached DWG. 4-1-34 A Distant View of R-105 (Iharanila)
from No. 7 National Road

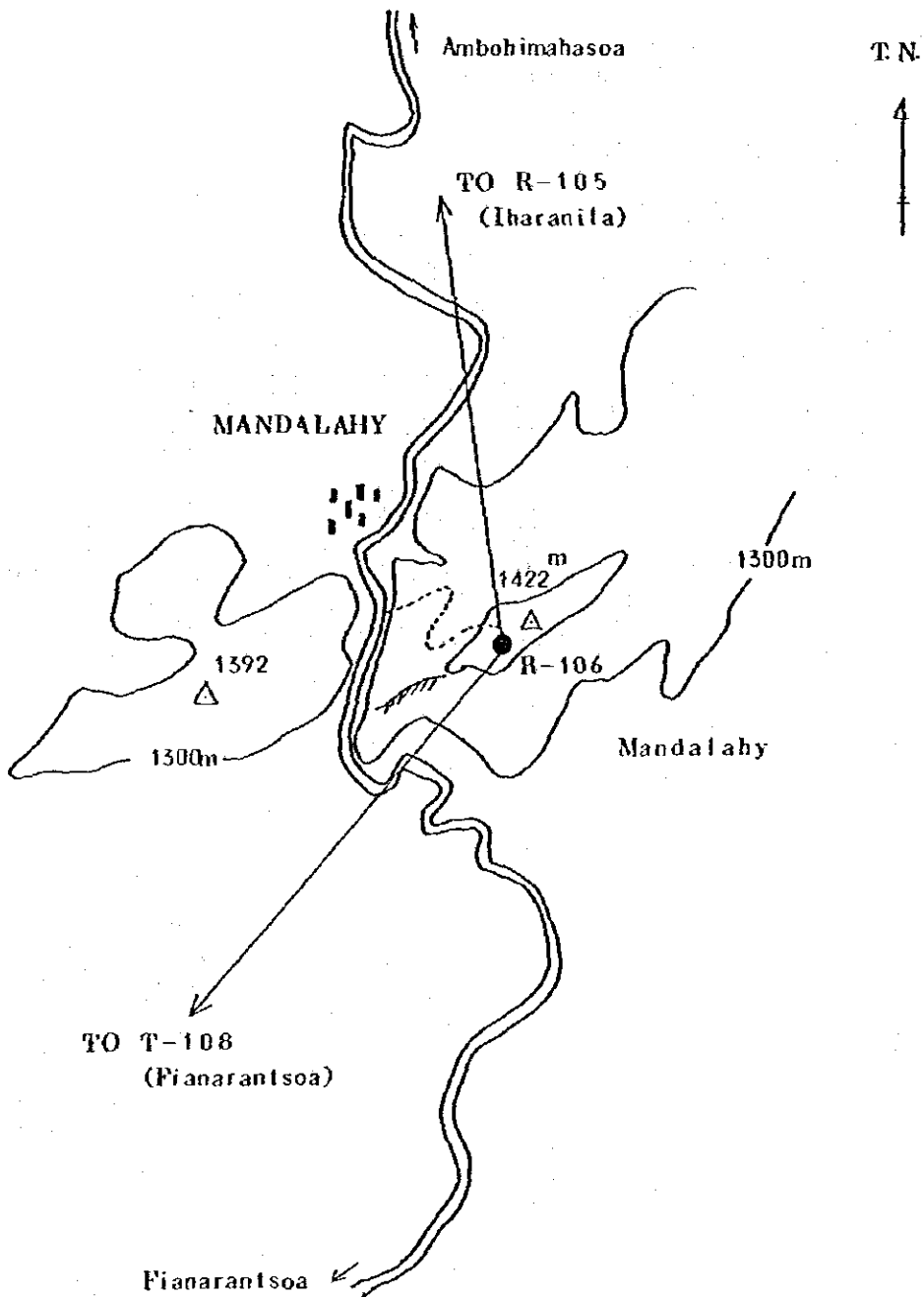
R-104 (Not visible)



Attached DWG. 4-1-35 A Distant View of R-104 (Andraibe) from R-105 (Iharanila)



Attached DWG. 4-1-36 A Distant View of R-106 (Maudalahy) from R-105 (Iharanila)

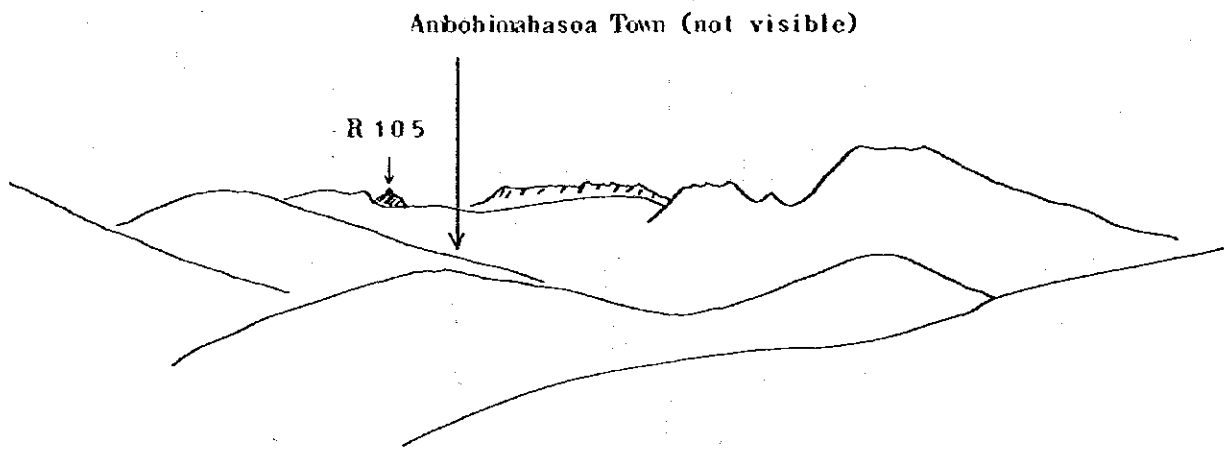


1) Site R-106

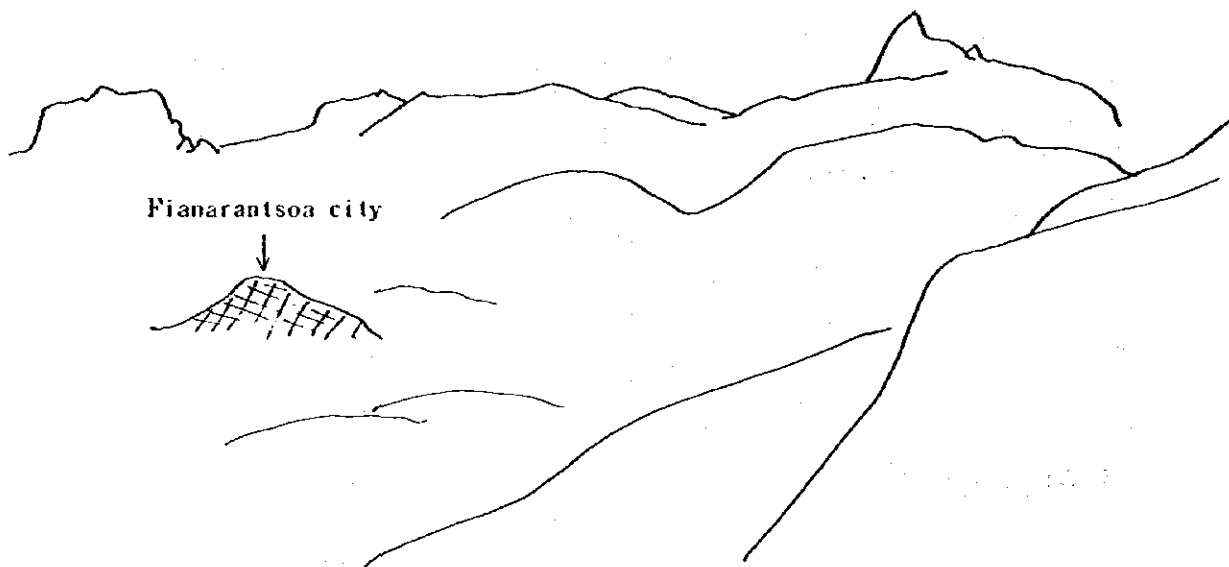
2) Access Road

A newly constructed road of about 1 km length will be required.

Attached DWG. 4-1-37 Guide Map of R-106 (Mandalahy)



Attached DWG. 4-1-38 A Distant View of R-105 (Iharanila)
from R-106 (Mandalahy)



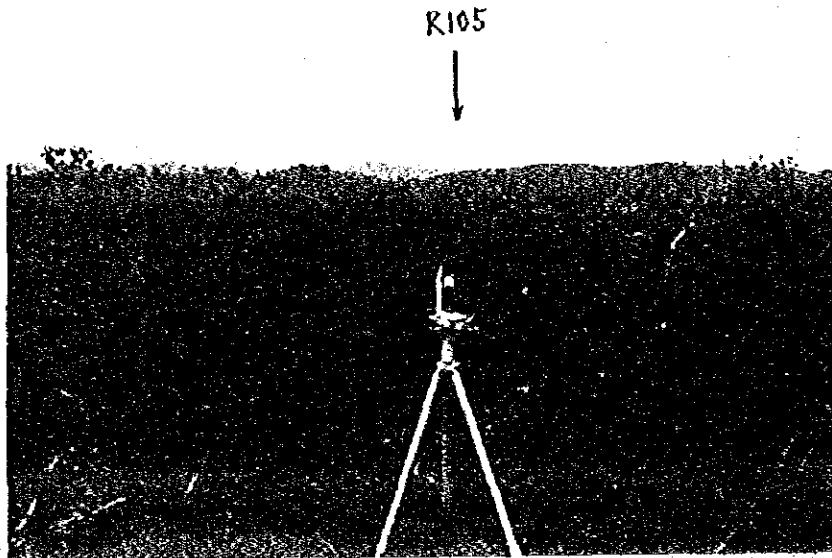
Attached DWG. 4-1-39 A Distant View of Fianarantsoa
from R-106 (Mandalahy)



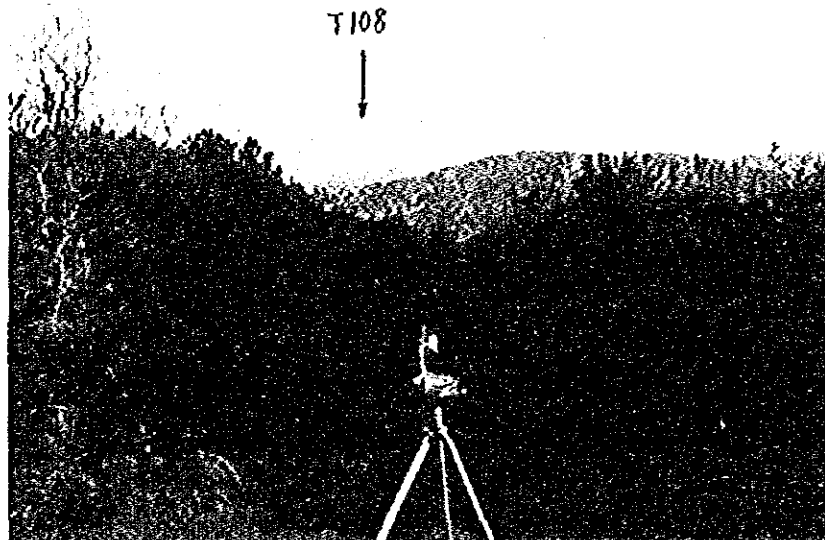
Attached DWG. 4-1-40 A Distant View of R-106 (Mandalahy)



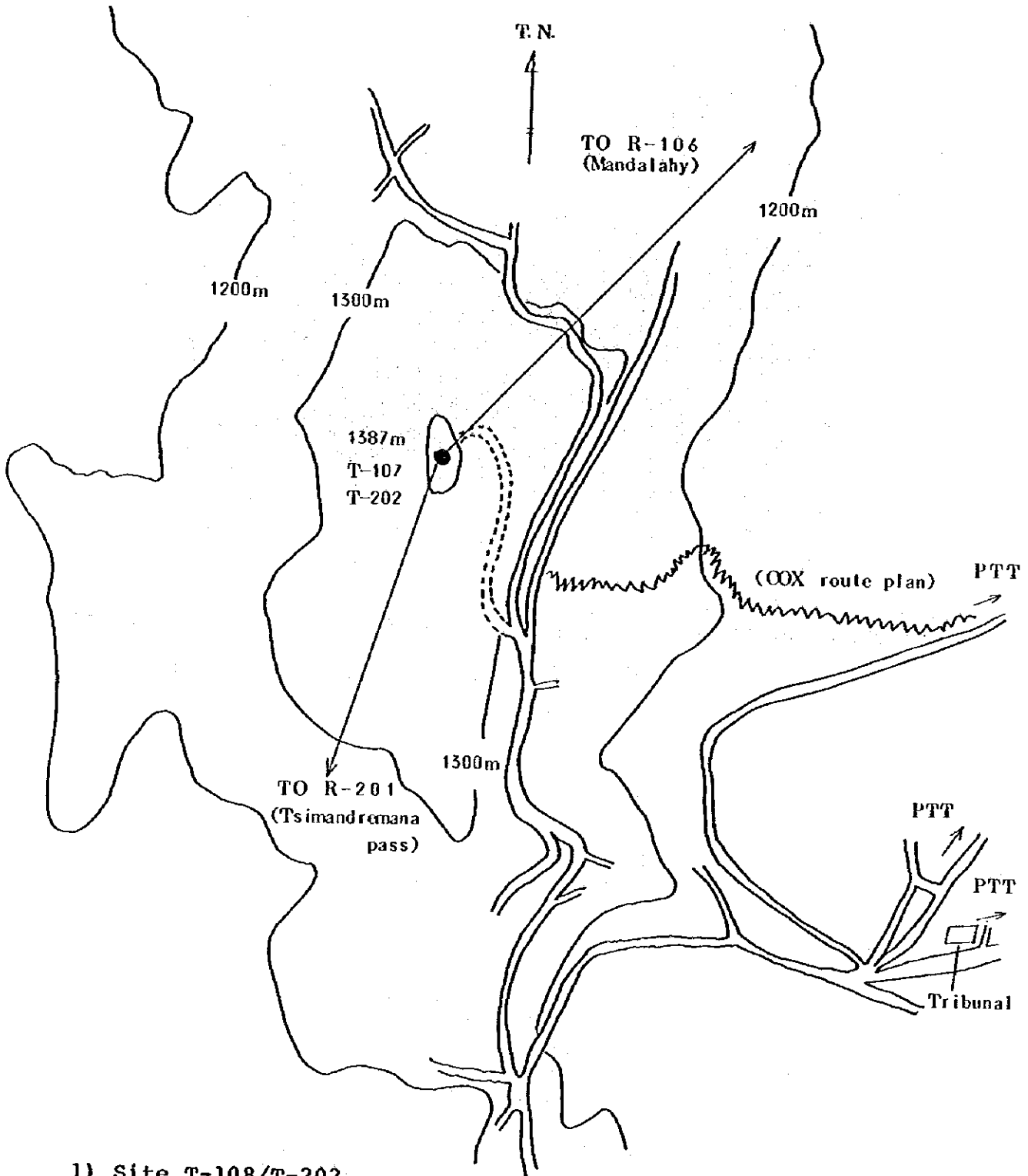
Attached DWG. 4-1-41 Site Snap of R-106 (Mandalahy)



Attached DWG. 4-1-42 A Distant View of R-105 (Iharanila)
from R-106 (Mandalahy)



Attached DWG. 4-1-43 A Distant View of T-108 (Fianarantsoa)
from R-106 (Mandalahy)



1) Site T-108/T-202

At Kianjasoa Hill
in Fianarantsoa City

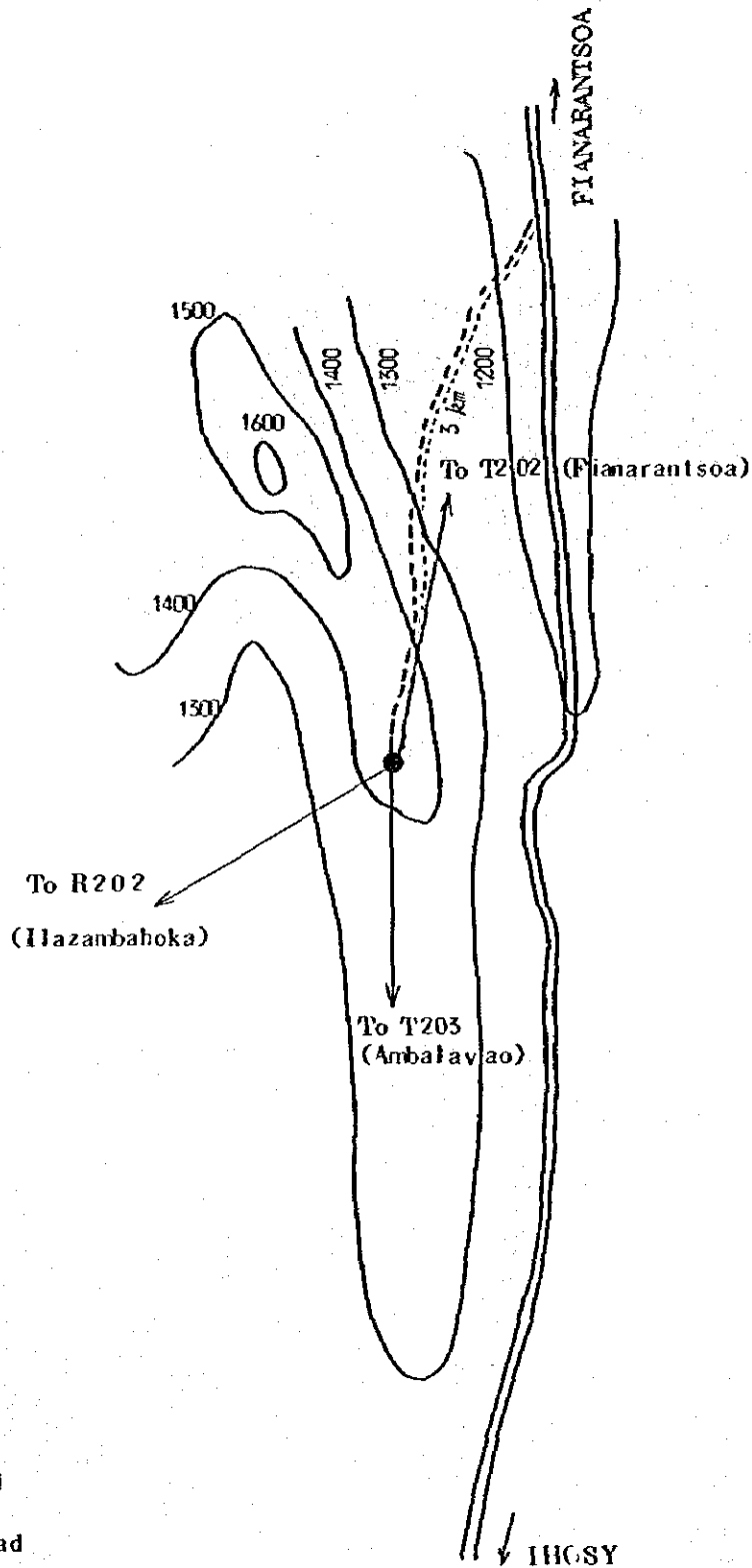
2) Access Road

A road of less than 1km will be required.

Attached DWG. 4-1-44 Guide Map of T-108/T-202 (Fianarantsoa)



Attached DWG. 4-1-45 A Distant View of T-108 (Fianarantsoa)
from Center of Fianarantsoa City



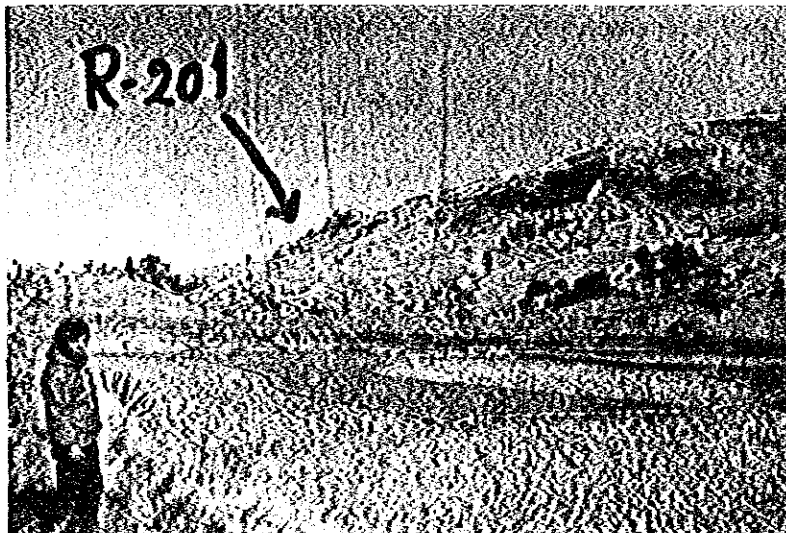
- 1) Site R-201
- 2) Access Road

A newly constructed road of about 3 km length will be required.

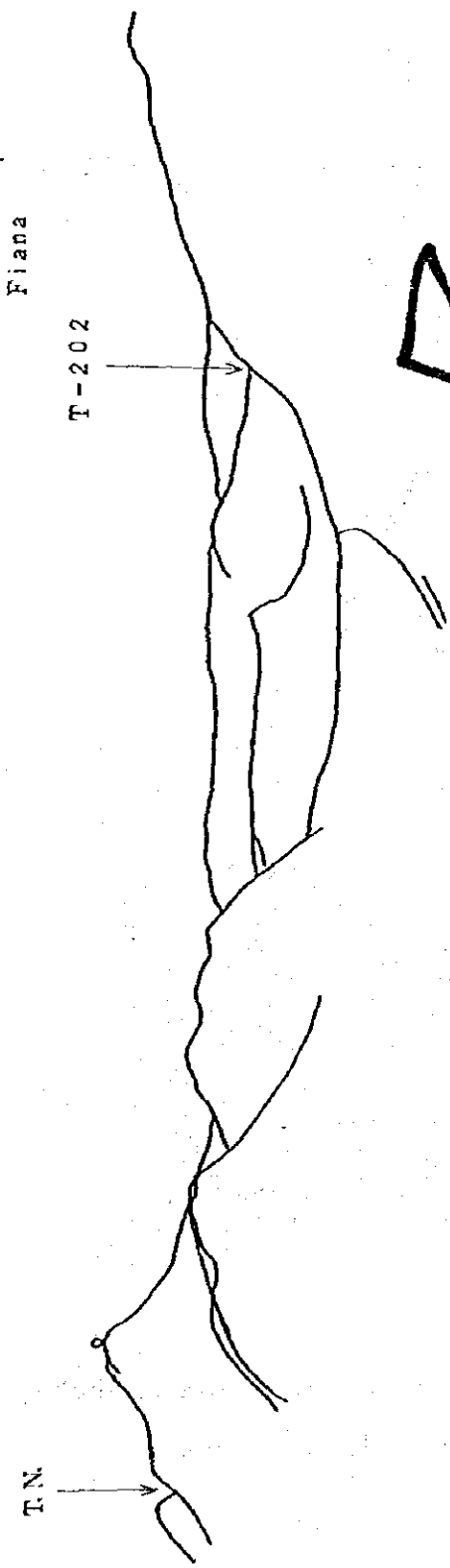
Attached DWG. 4-1-46 Guide Map of R-201 (Tsimanbramana Pass)



Attached DWG. 4-1-47 Site Snap of R-201 (Tsimandremana Pass).

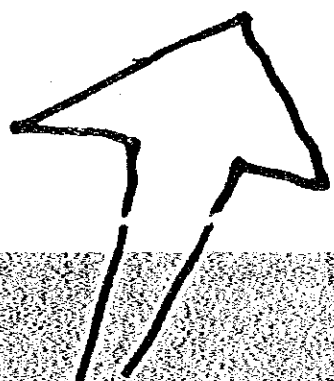
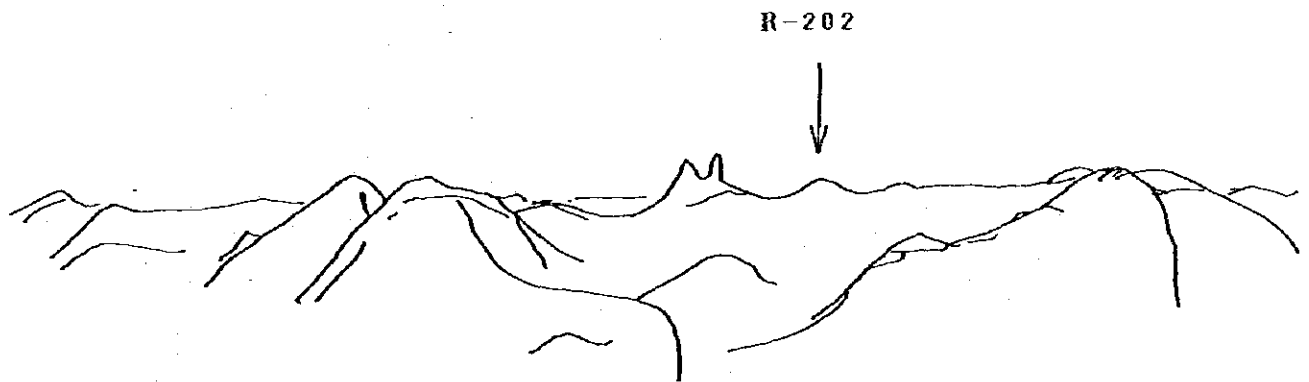


Attached DWG. 4-1-48 A Distant View of R-201 (Tsimandremana Pass)
from No.7 National Road

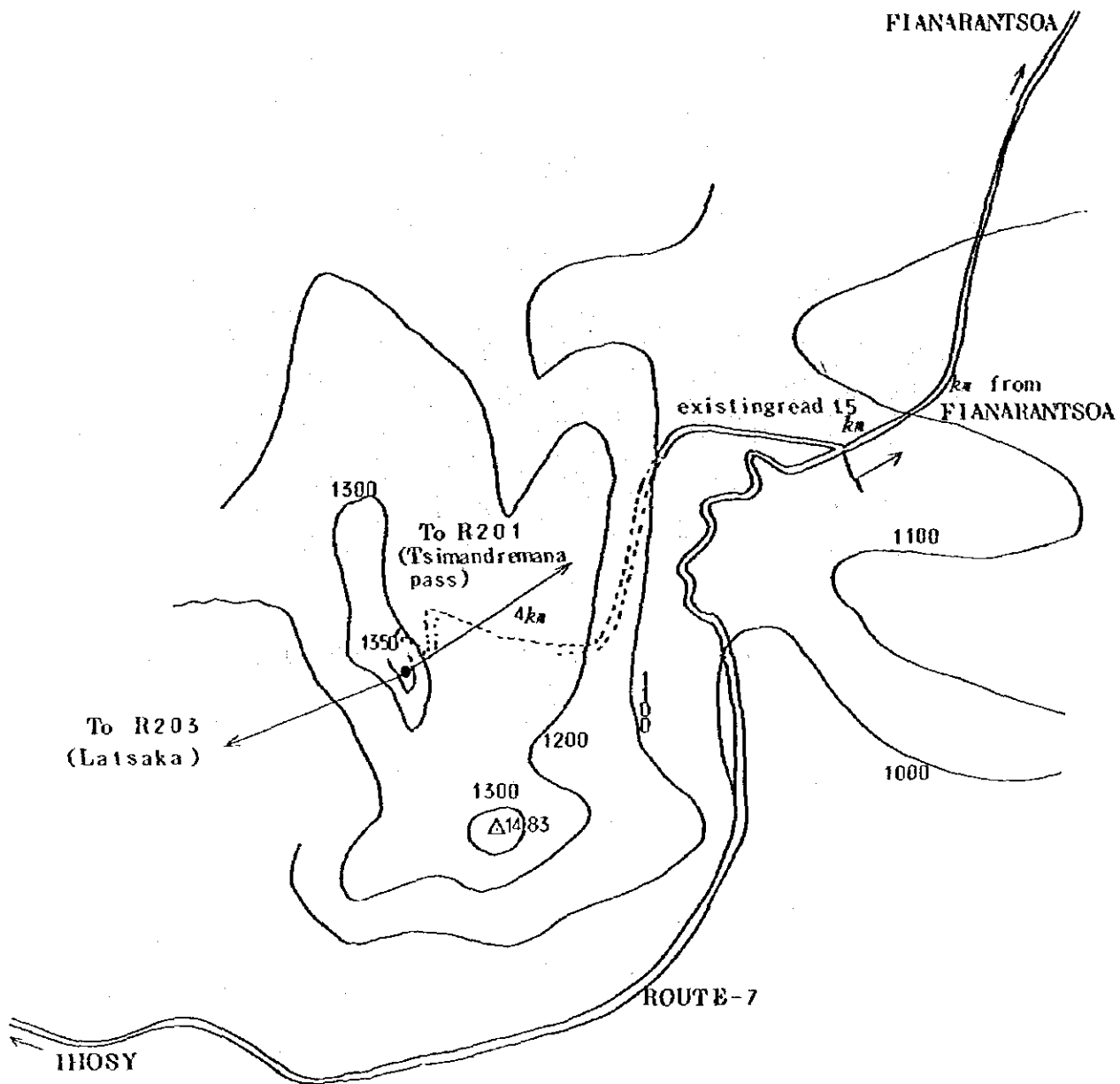


Attached DWG. 4-1-49

A Distant View of T-202
 (Fianarantsoa) from R-201
 (Tsimandremana Pass)



Attached DWG. 4-1-50 A Distant View of R-202 (Ilazambahoka)
from R-201 (Tsimandremana Pass)



1) Site

A little rocky, but wide at the top.

2) Access Road

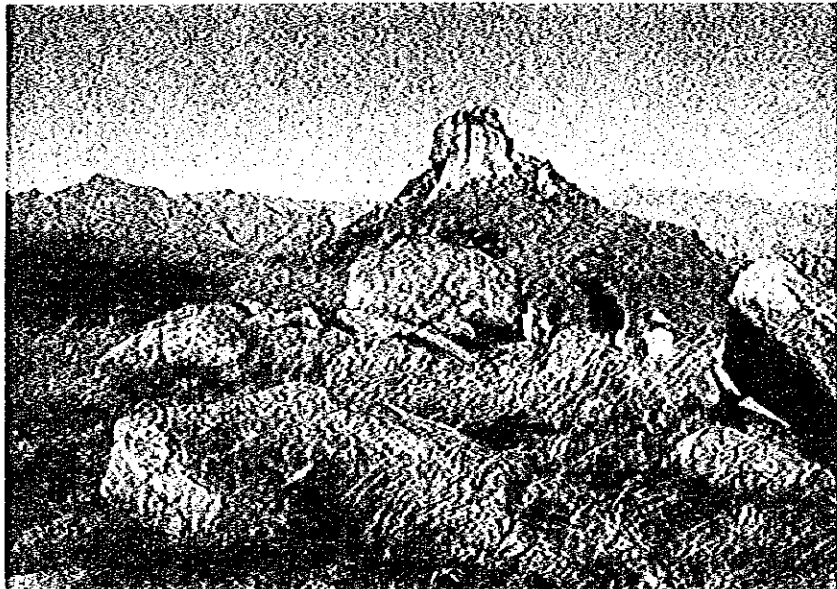
A little rocky near the top of the hill.

But other parts of the new road will be relatively easy to construct.

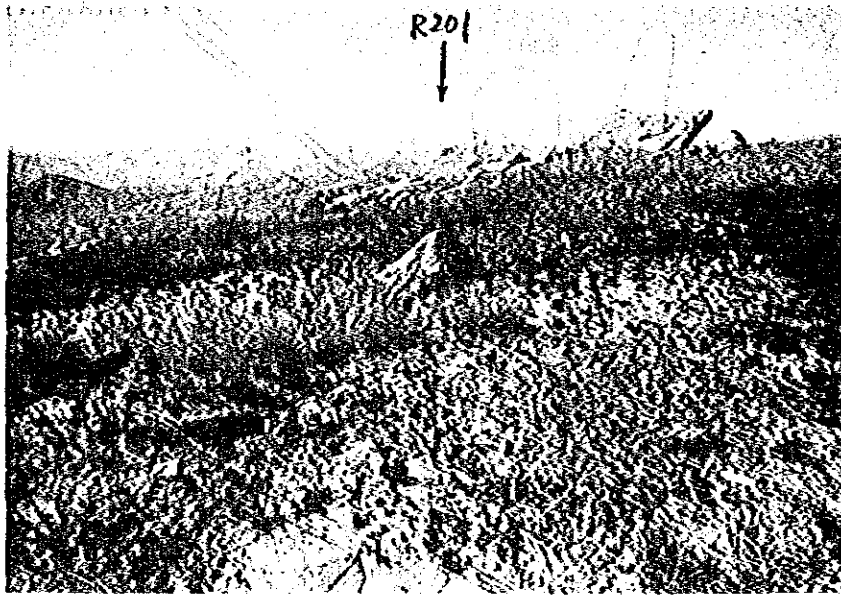
Attached DWG. 4-1-51 Guide Map of R-202 (Ilazambahoka)



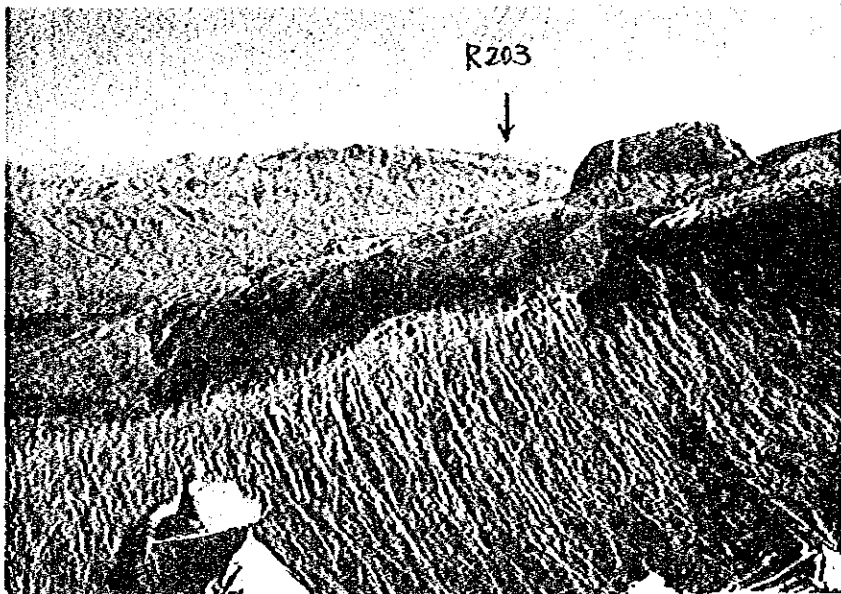
Attached DWG. 4-1-52 A Distant View of R-202 (Ilazambahoka)



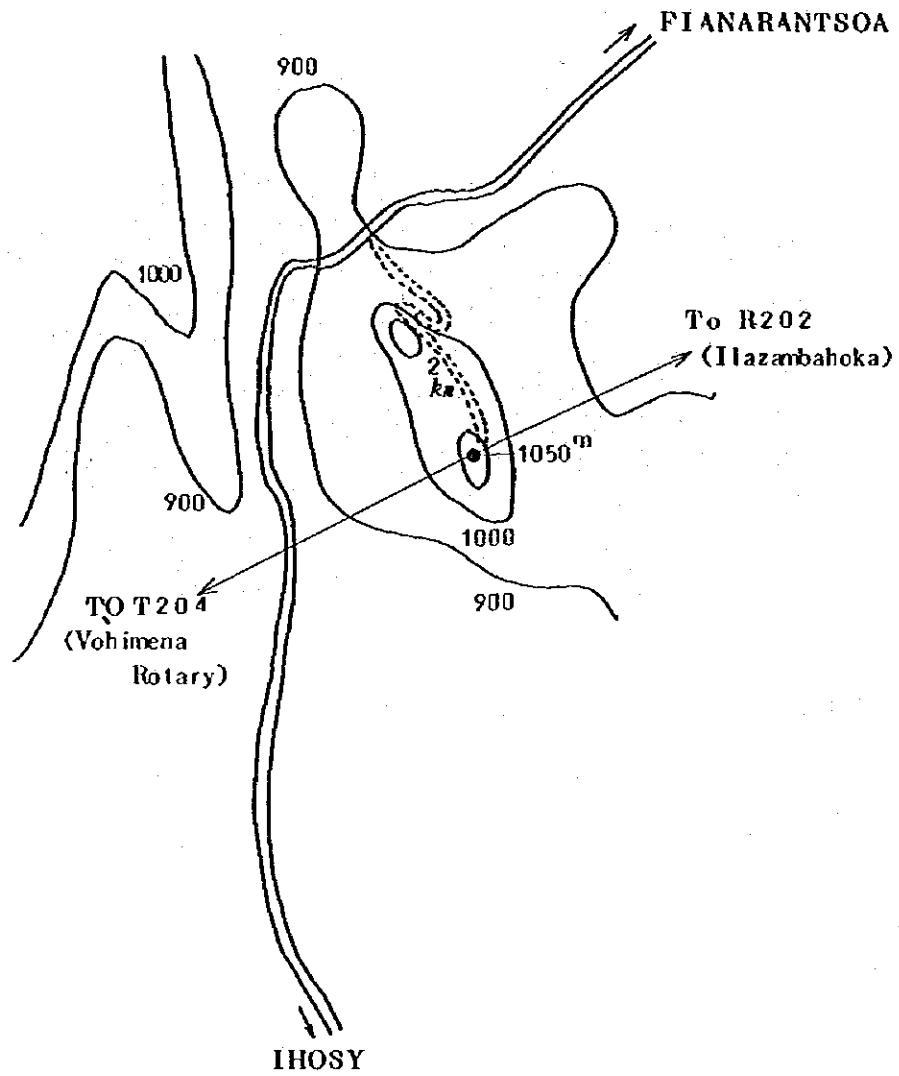
Attached DWG. 4-1-53 Site Snap of R-202 (Ilazambahoka)



Attached DWG. 4-1-54 A Distant View of R-201 (Tsimandremana Pass)
from R-202 (Ilazambahoka)



Attached DWG. 4-1-55 A Distant View of R-203 (Latsaka)
from R-202 (Ilazambahoka)



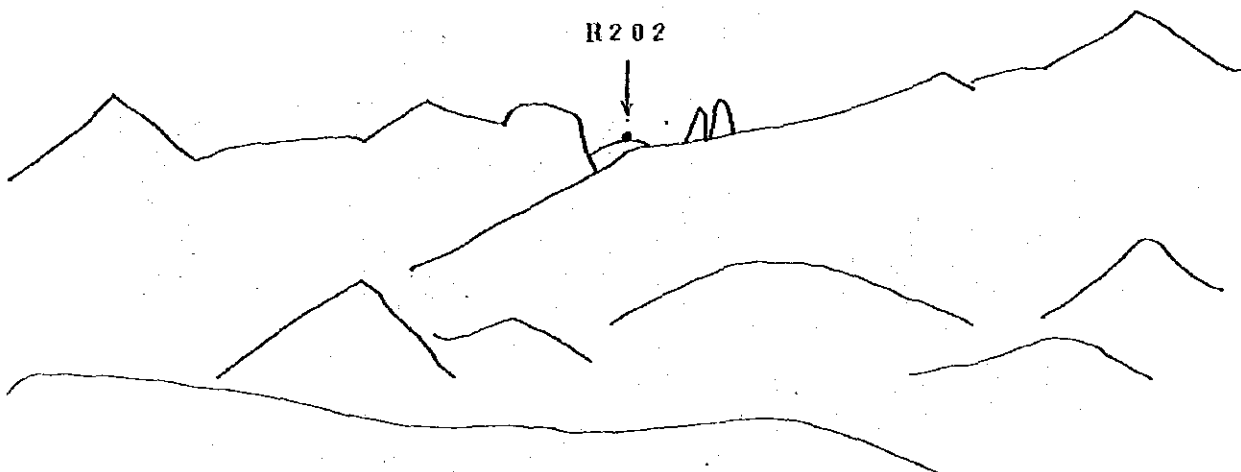
1) Site

A little rocky at the top.

2) Access Road

A little rocky but not difficult to construct.

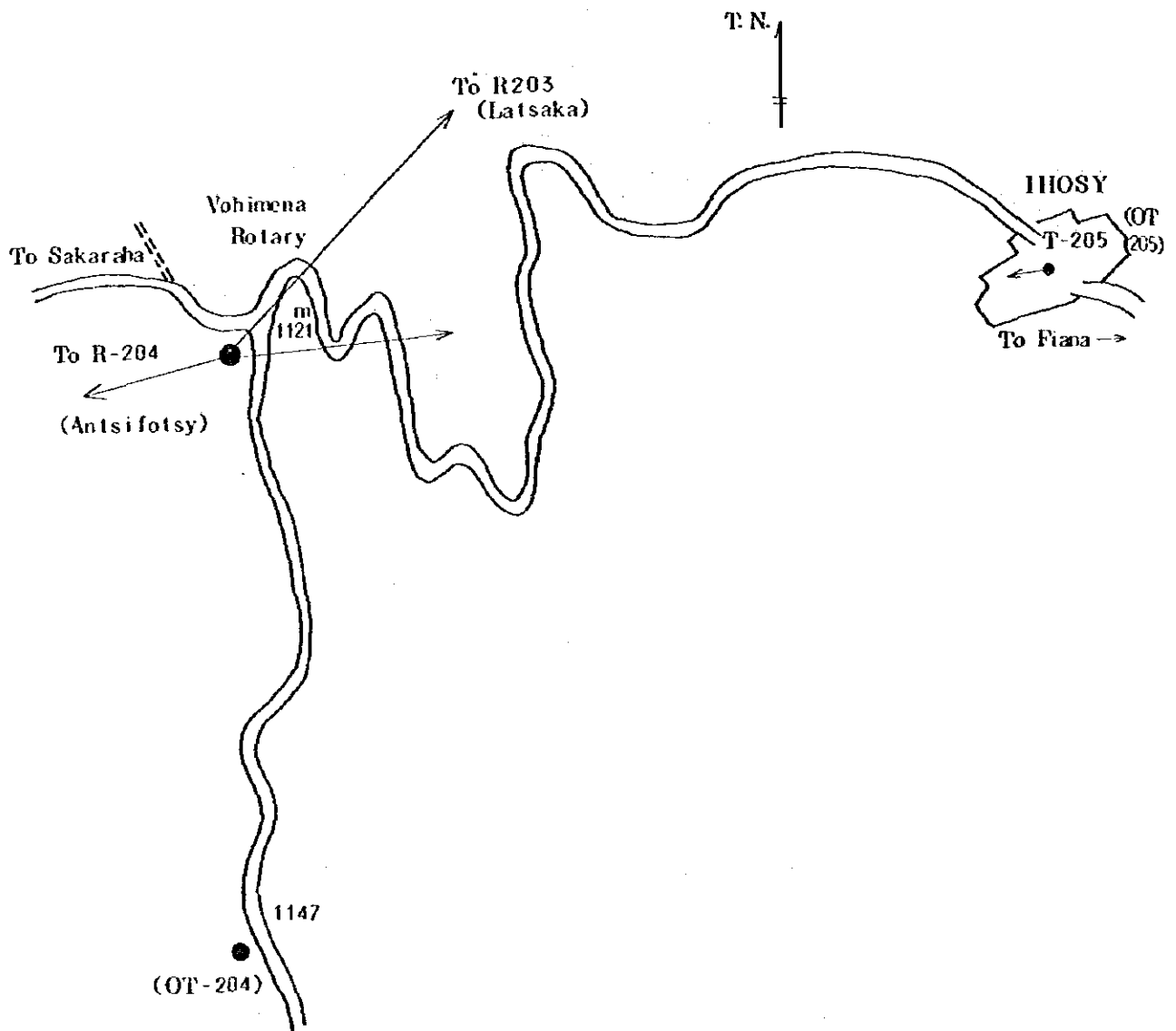
Attached DWG. 4-1-56 Guide Map of R-203 (Latsaka)



Attached DWW. 4-1-57 A Distant View of R-202 (Ilazambahoka)
from R-203 (Latsaka)



Attached DWG. 4-1-58 Site Snap of R-203 (Latsaka)



1) Site T-204

Located on the west side of Vohimena rotary.

2) Access Road

Facing the national road.

Attached DWG. 4-1-59 Guide Map of T-204/T-205 (Vohimena Rotary/Ihosy)

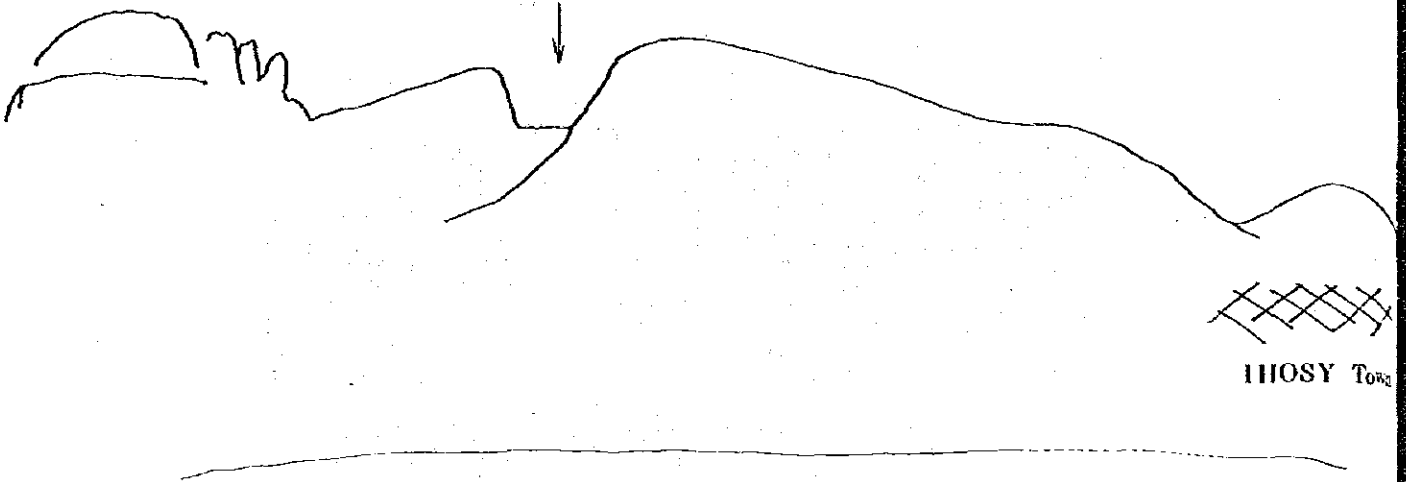


Attached DWG. 4-1-60 Site Snap of T-204 (Vohimena Rotary)



Attached DWG. 4-1-61 A Distant View of T-205 (Ihosy City)
from T-204 (Vohimena Rotary)

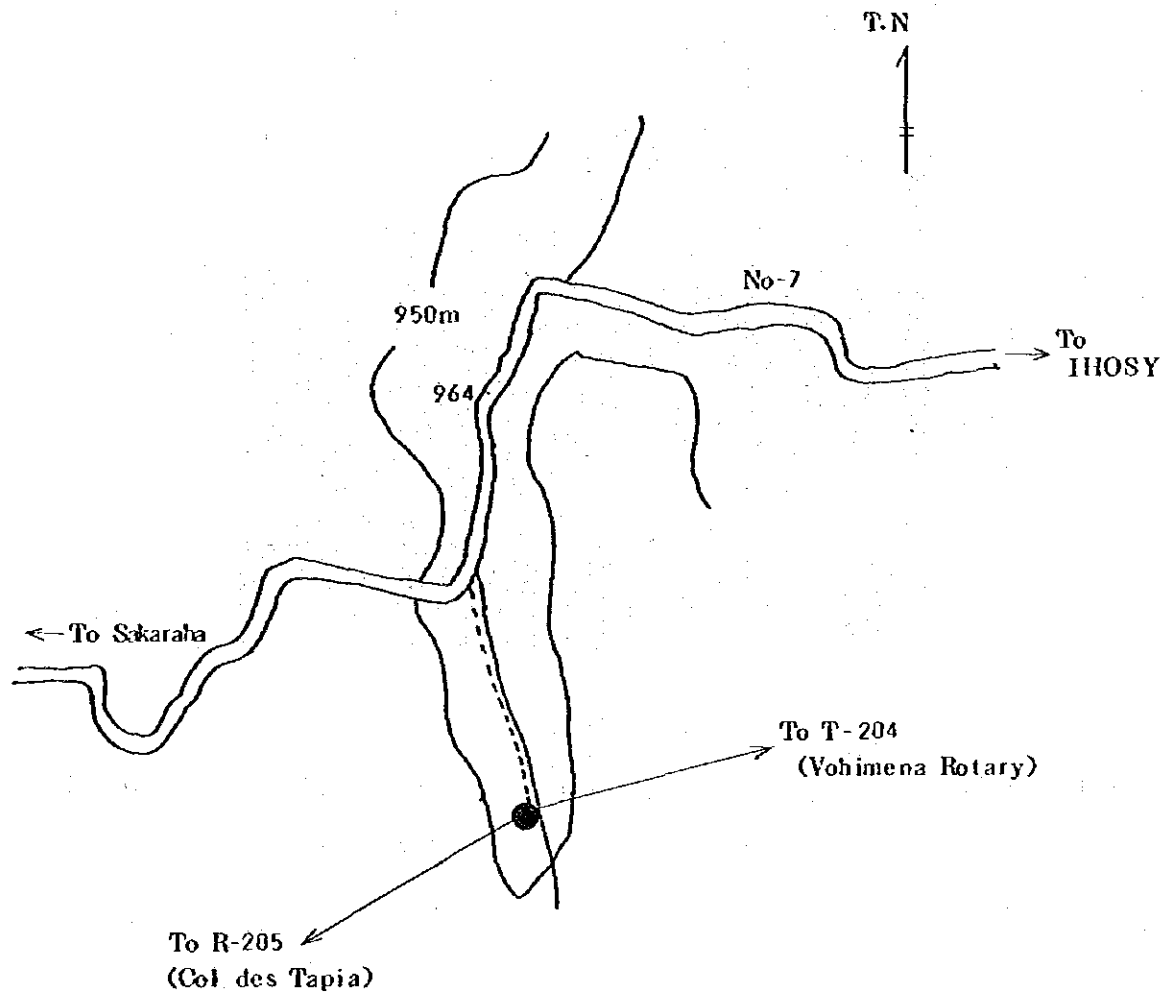
R 203 (not visible)



IHOSY Town

ROUTE - 16 - 7

Attached DWG. 4-1-62 A Distant View of R-203 (Latsaka)
from T-204 (Vohimena Rotary)



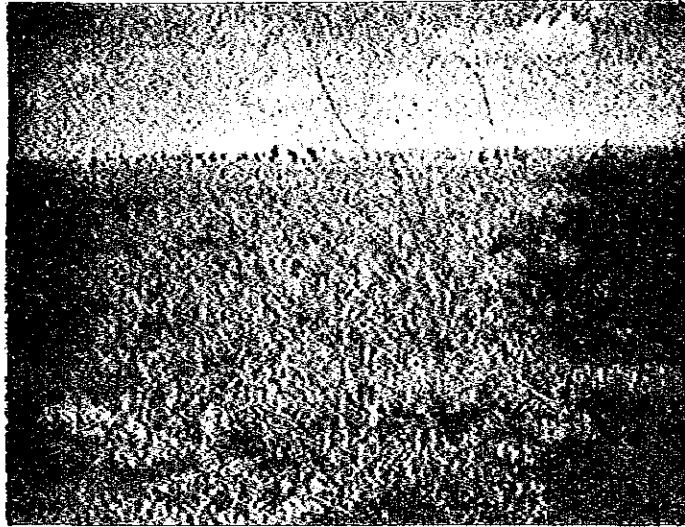
1) Site R-204

Almost flat land. No tree.

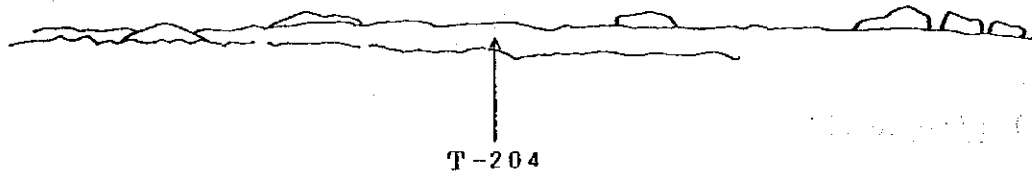
2) Access Road

Some correction of existing walking path will be necessary (0.5 km)

Attached DWG. 4-1-63 Guide Map of R-204 (Antsifotsy)

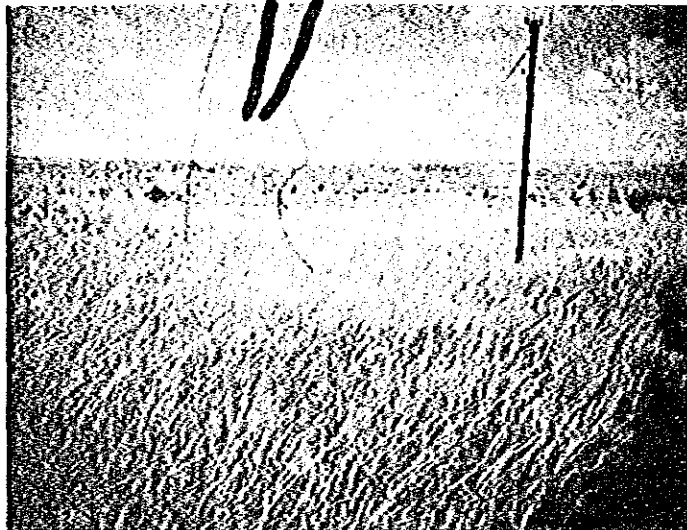
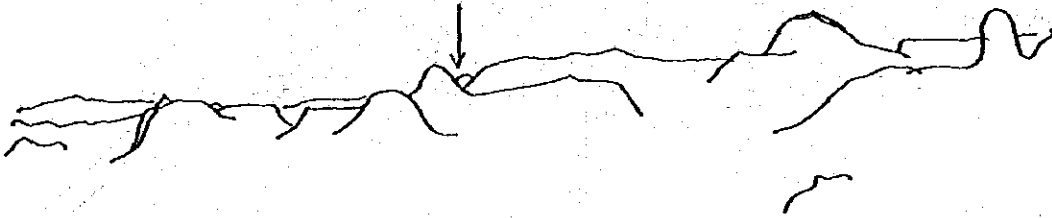


Attached DWG. 4-1-64 Proposed Site of R-204 (Antsifotsy)

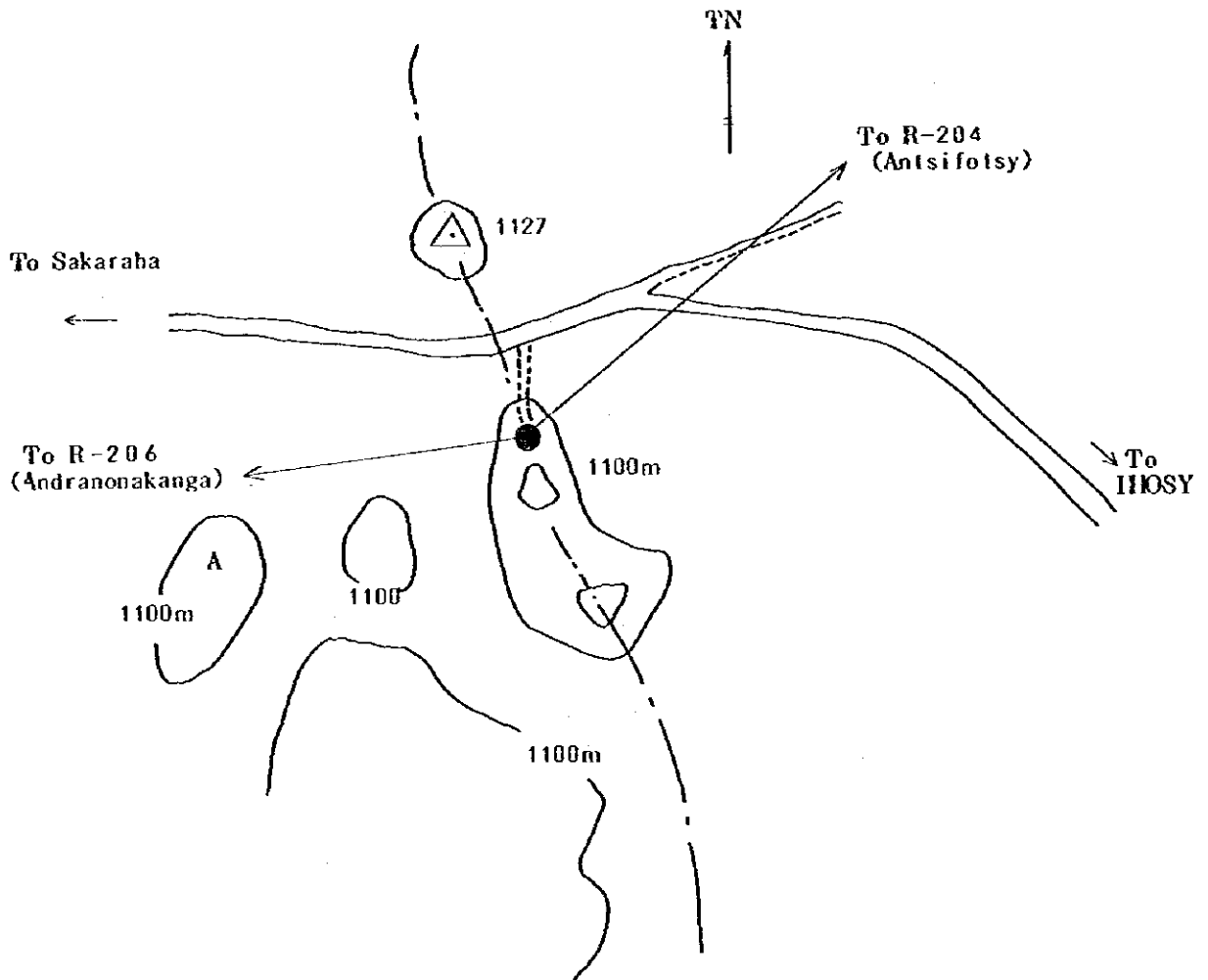


Attached DWG. 4-1-65 A Distant View of T-204 (Vohimena Rotary)
from R-204 (Antsifotsy)

R-205



Attached DWG. 4-1-66 A Distant View of R-205 (Col Des Tapia)
from R-204 (Antsifotsy)



1) Site R-205

Some bushes should be cut.

Radio path will pass by foot of Mt. A.

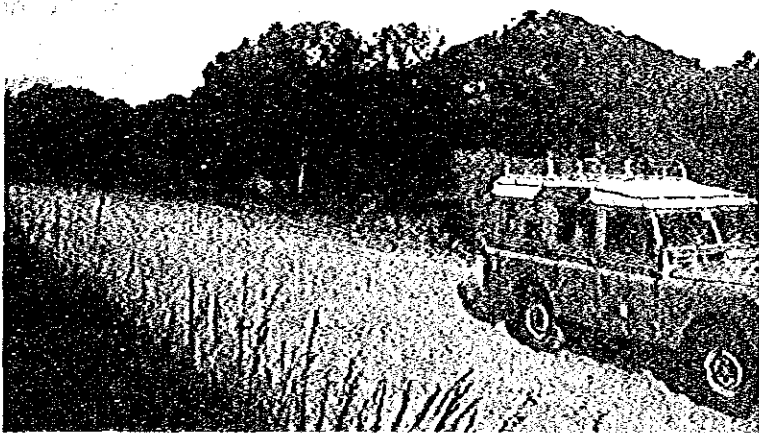
2) Access Road

The length of the newly constructed road will be 0.5 km.

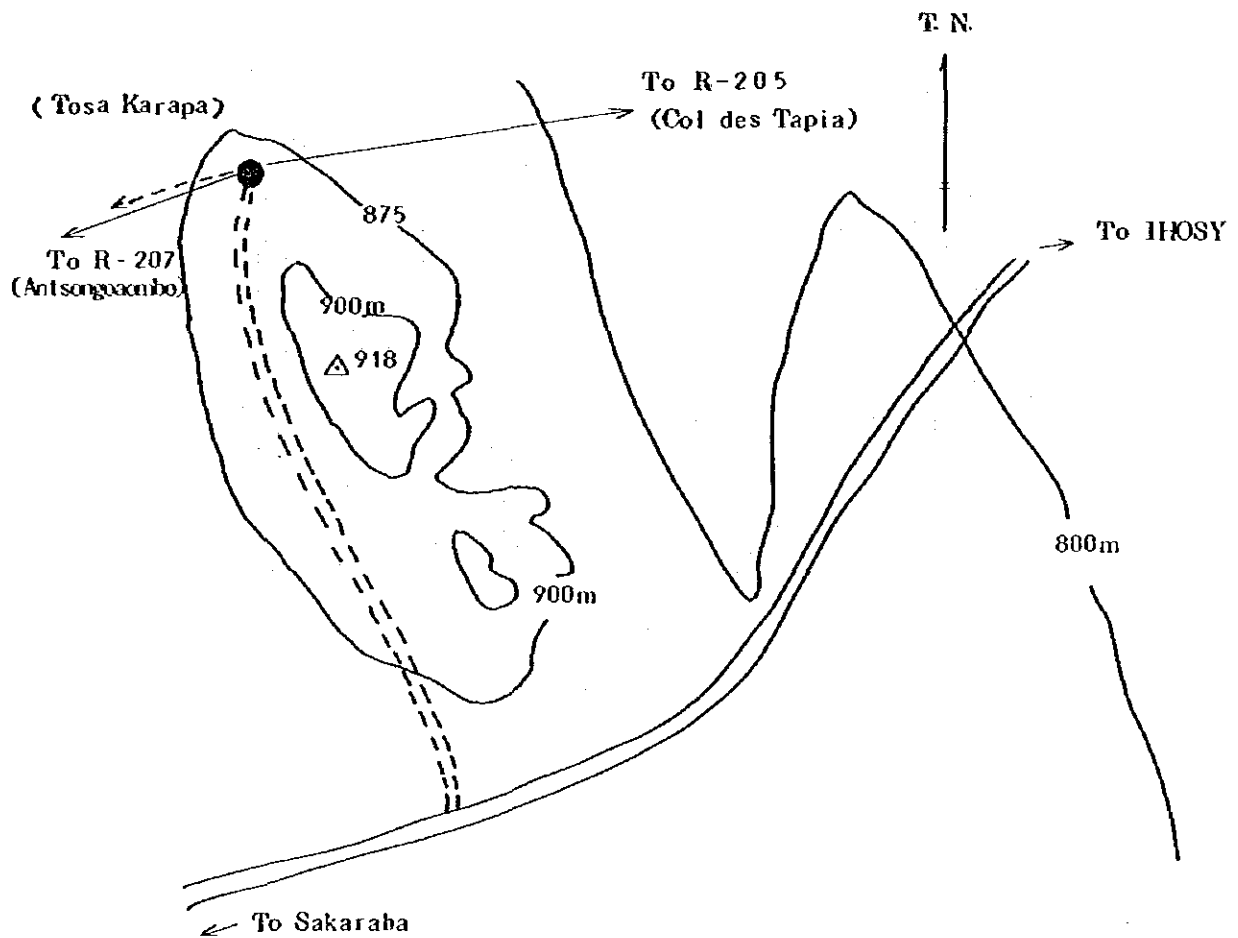
Attached DWG. 4-1-67 Guide Map of R-205 (Col Des Tapia)



Attached DWG. 4-1-68 Proposed Site of R-205 (Col Des Tapia)



Attached DWG. 4-1-69 A Distant View of R-205 (Col Des Tapia)
from the No.7 National Road



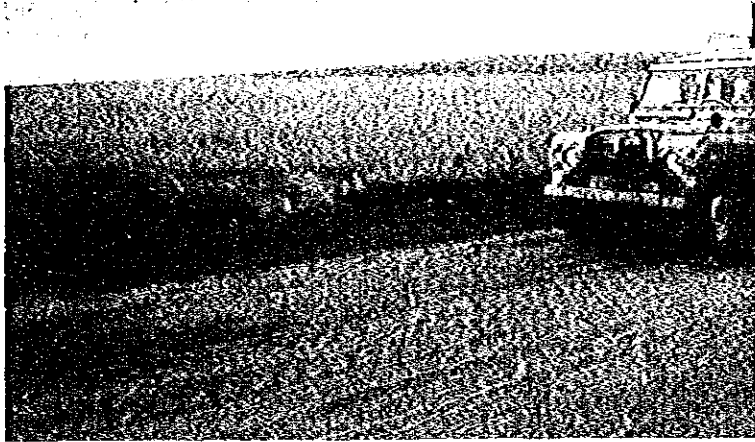
1) Site R-206

Herb field. Identification of site will not be so easy.
Because of no prominence in topographical features.

2) Access Road

The length of the road which will be easy to construct
will be 4 km.

Attached DWG. 4-1-70 Guide Map of R-206 (Andranonakanga)



Attached DWG. 4-1-71 A Distant View of R-206 (Andranonakanga)
from No.7 National Road



Attached DWG. 4-1-72 Site Snap of R-206 (Andranonakanga)

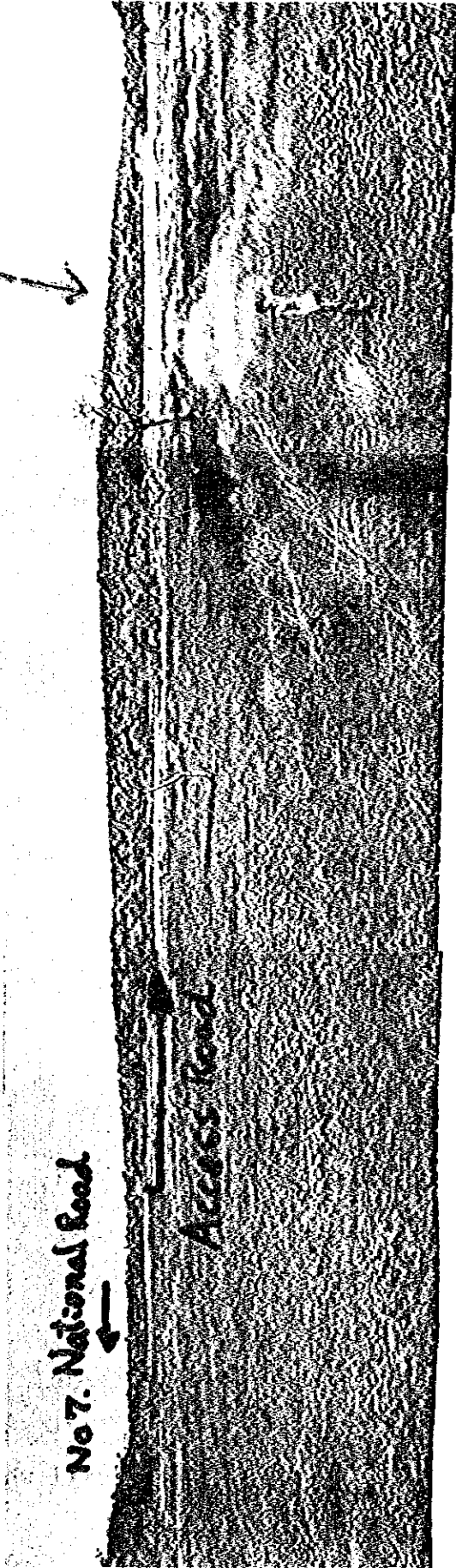
R -207



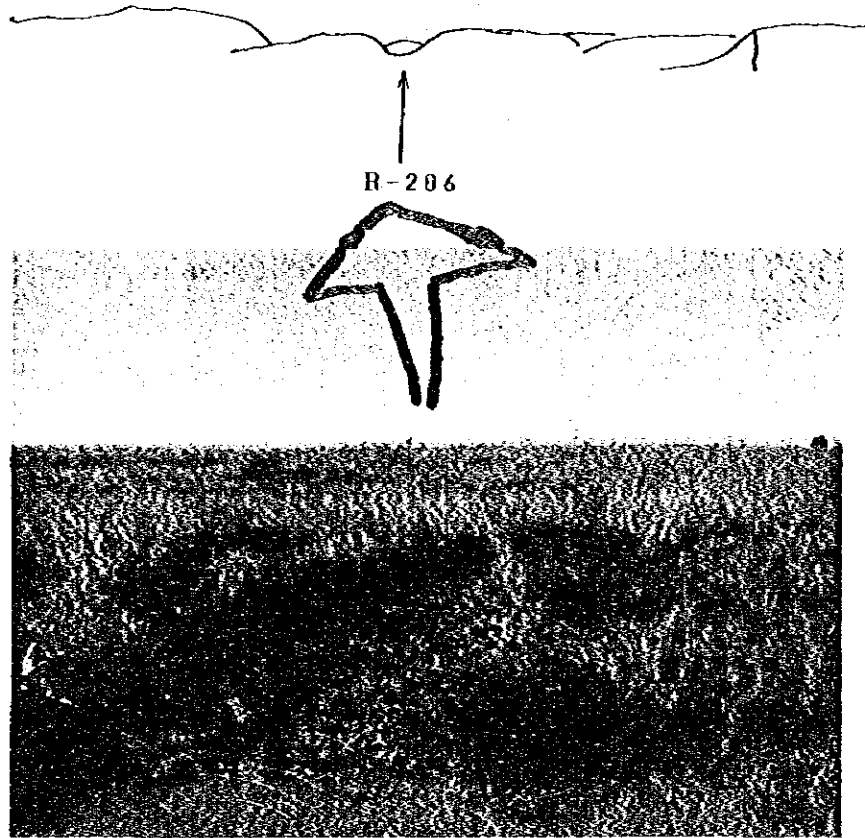
No 7. National Road



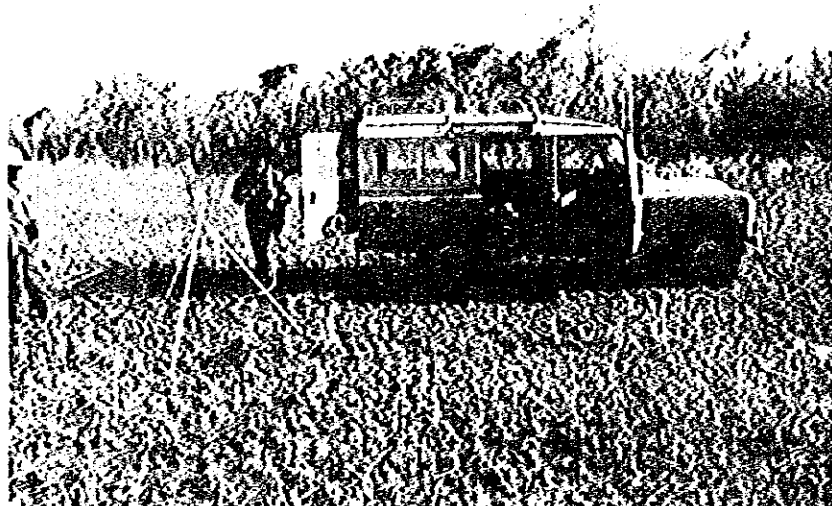
Access Road



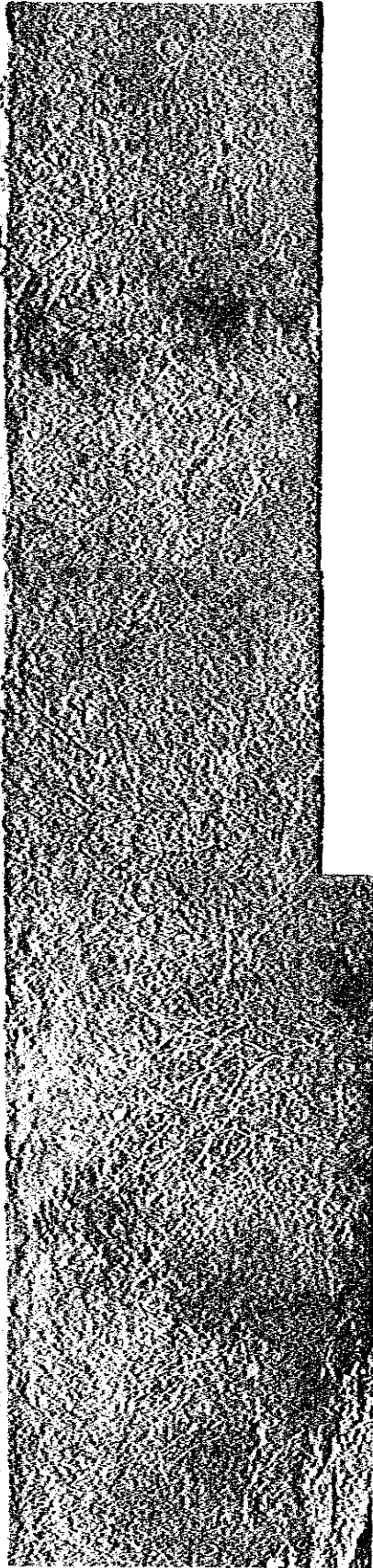
Attached DWG. 4-1-74 A Distant View of R-207 (Antsongoambo) from Basin Field
Behind here a small hill (502m in height) stands.



Attached DWG. 4-1-75 A Distant View of R-206 (Andranonakanga)
from the Field Near R-207 (Antsongoambo)



Attached DWG. 4-1-76 Bottom of Small Hill where Upper Photo
Was Taken
(Site R-207 is behind this small hill.)



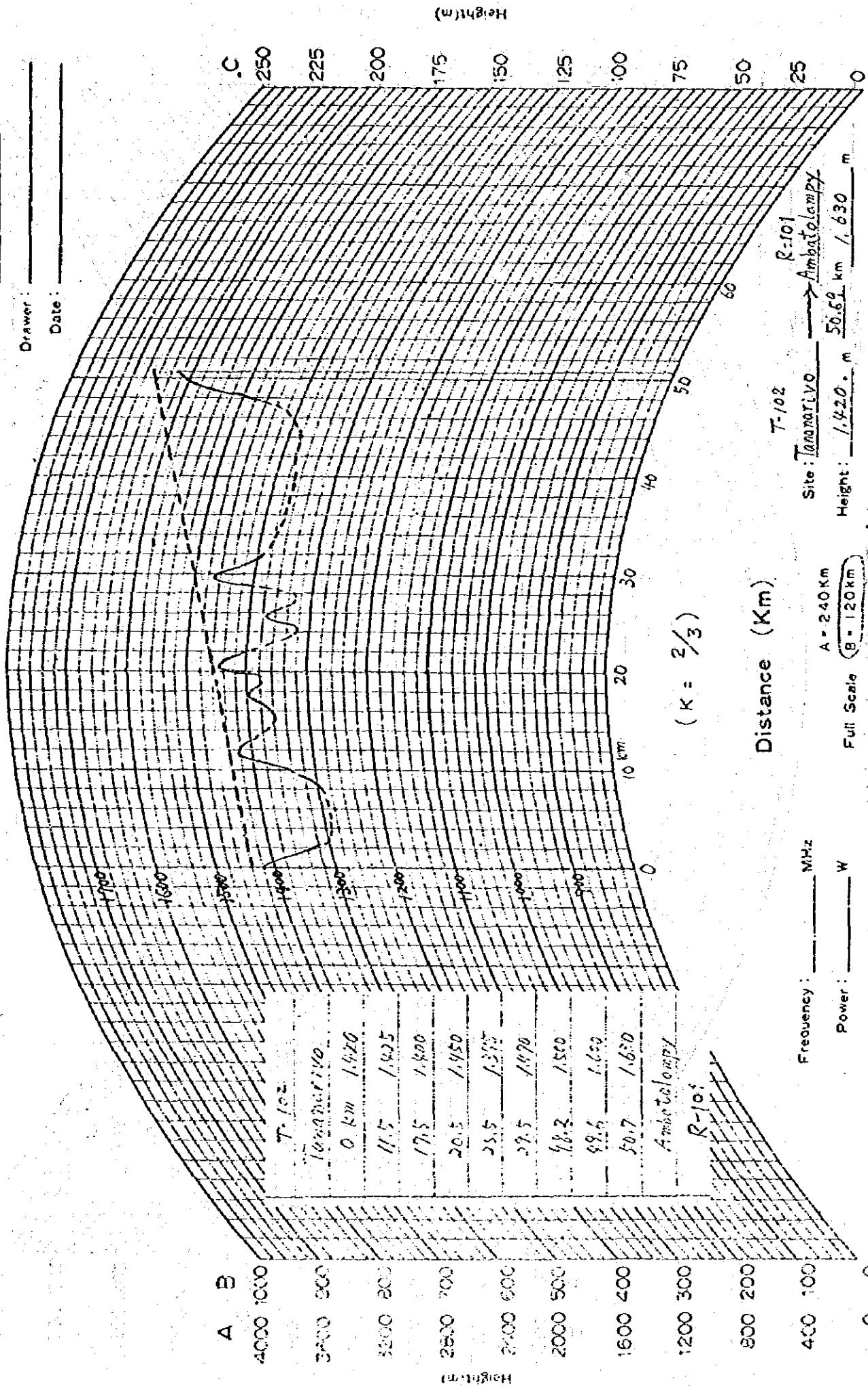
Attached DWG. 4-1-78 Site Snap of R-208 (Ankororoka) from No.7 National Road

Appendix 4-2

Path Profiles

PATH PROFILE

Name of Route: _____
 No.: (1)
 Drawer: _____
 Date: _____



A	B	C
4000	1000	250
3500	900	225
3200	800	200
2800	700	175
2400	600	150
2000	500	125
1600	400	100
1200	300	75
800	200	50
400	100	25
0	0	0

$(K = 2/3)$

Distance (Km)

A = 240 Km
 Full Scale B = 120 Km
 C = 60 Km

Frequency: _____ MHz
 Power: _____ W

T-102 Site: Tananarivo → R-101 Ambatolampy
 Height: 1,420 m 50.69 km / 1,630 m
 Antenna Height: 20 m 40 m

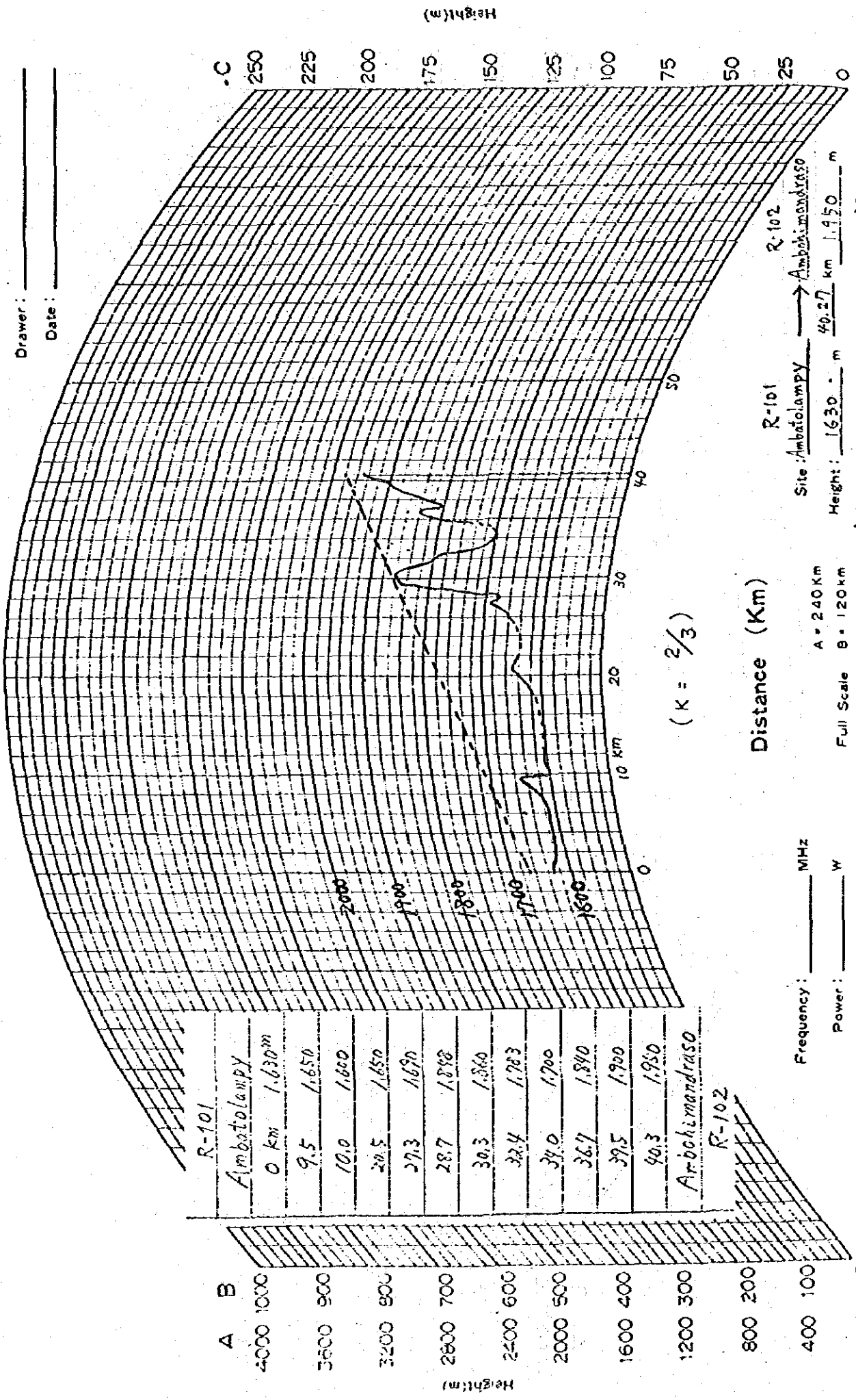
PATH PROFILE

Name of Route: _____

No.: (2)

Drawer: _____

Date: _____



R-101	
Ambatolampy	0 km 1.630m
	9.5 1.650
	10.0 1.600
	20.5 1.650
	27.3 1.690
	28.7 1.800
	30.3 1.860
	32.4 1.783
	34.0 1.700
	36.7 1.840
	39.5 1.900
	40.3 1.950
Ambohimandraso	

Distance (Km)

(K = 2/3)

Site: Ambatolampy → Ambohimandraso

R-101 R-102

Height: 1630 m 40.27 km 1.950 m

Antenna height: 4.0 m 30 m

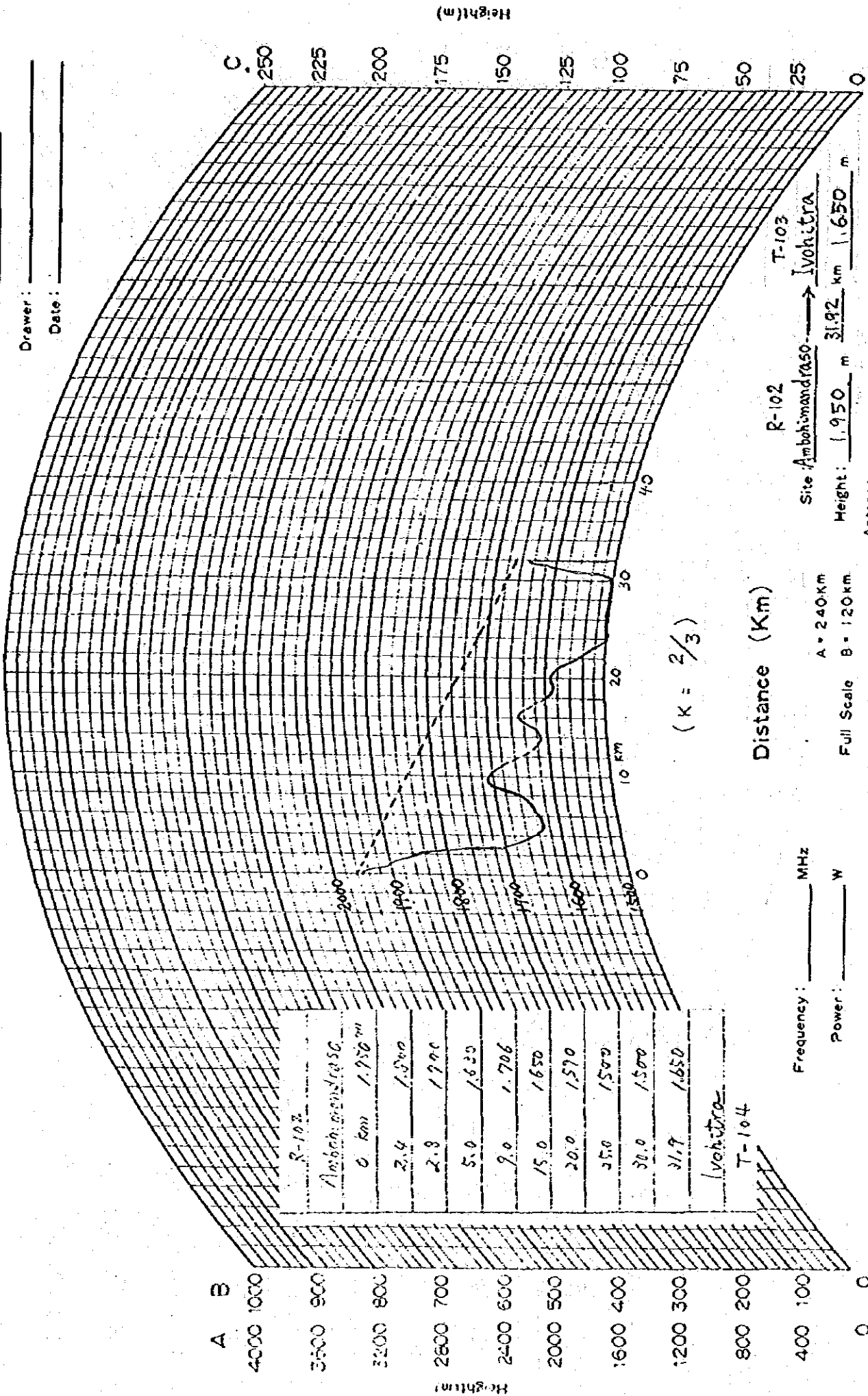
A = 240 Km
B = 120 Km
C = 60 Km

Frequency: _____ MHz

Power: _____ W

PATH PROFILE

Name of Route: _____
 No.: (3)
 Drawer: _____
 Date: _____



$(K = \frac{2}{3})$

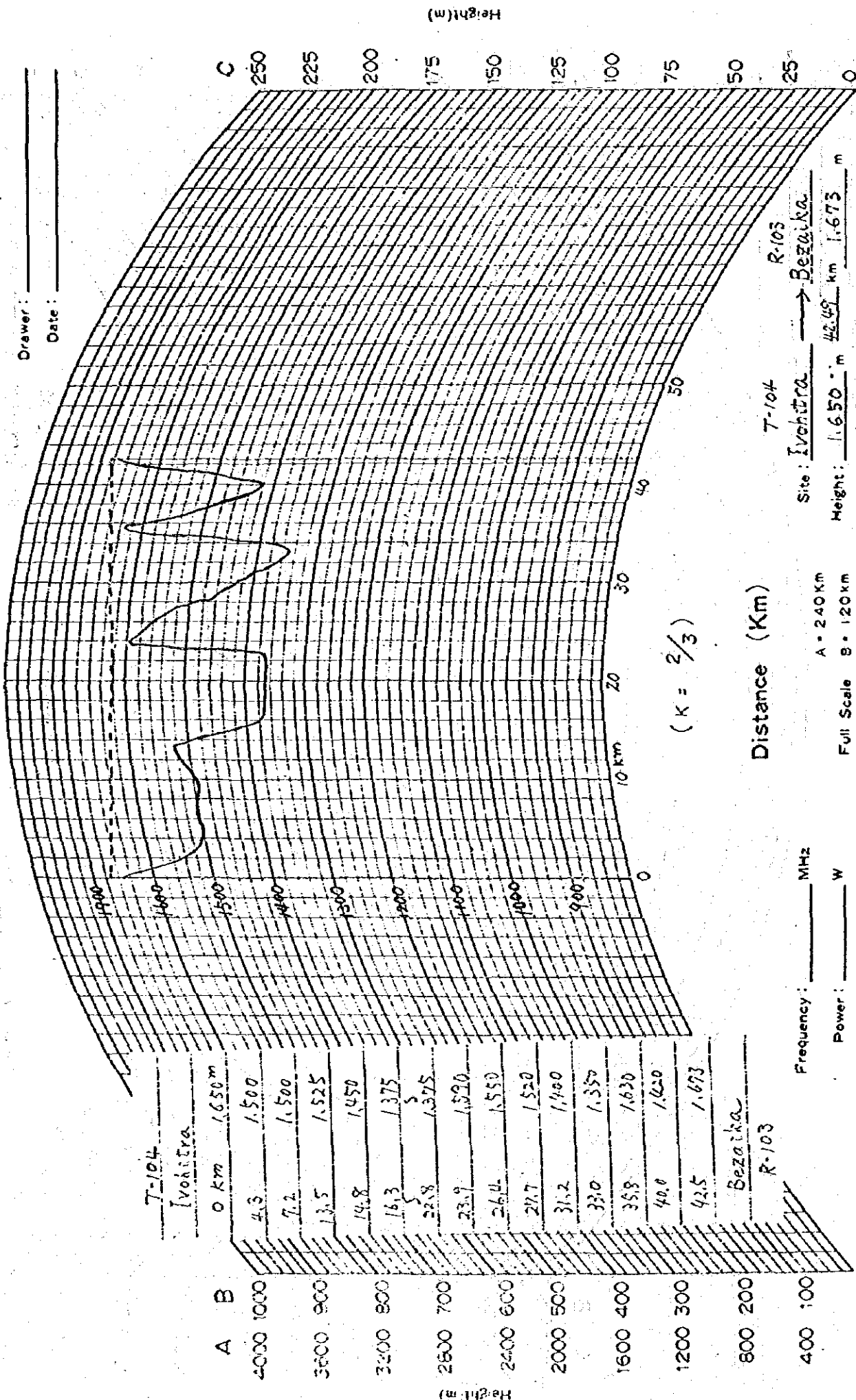
Distance (Km)

R-102
 Site: Ambhimandraso → Ivohitra
 Height: 1950 m 31.92 km 1650 m
 Antenna height: 10 m 20 m

Frequency: _____ MHz
 Power: _____ W
 A = 240 Km Full Scale B = 120 Km
 C = 60 Km

PATH PROFILE

Name of Route: _____
 No.: (4)
 Drawer: _____
 Date: _____



A	B	0 km	1.650 m
4000	1000	4.3	1.500
3600	900	7.2	1.500
3200	800	13.5	1.525
2800	700	14.8	1.450
2600	700	16.3	1.375
2400	600	22.8	1.375
2400	600	23.9	1.520
2000	500	26.4	1.550
1600	400	27.7	1.520
1600	400	31.2	1.100
1200	300	33.0	1.350
800	200	35.8	1.630
400	100	40.0	1.620
0	0	42.5	1.673

$(K = \frac{2}{3})$

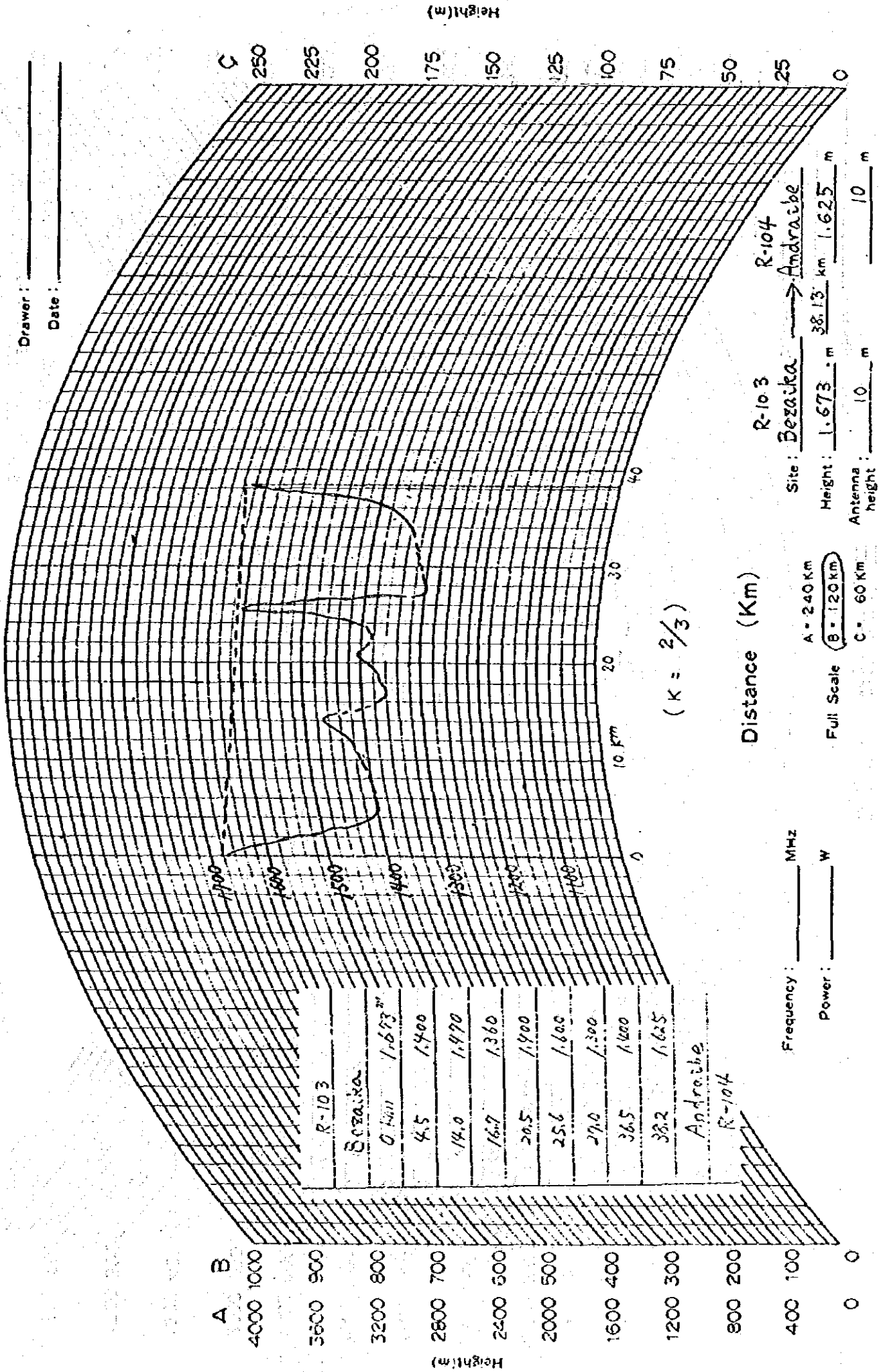
Distance (Km)
 A = 240 Km
 B = 120 Km
 C = 60 Km
 Full Scale

Site: Ivohitra → Bezanka
 R-104 R-103
 Height: 1.650 m 42.49 km 1.673 m
 Antenna height: 20 m 10 m

Frequency: _____ MHz
 Power: _____ W

PATH PROFILE

Name of Route: _____
 No.: (5)
 Drawer: _____
 Date: _____

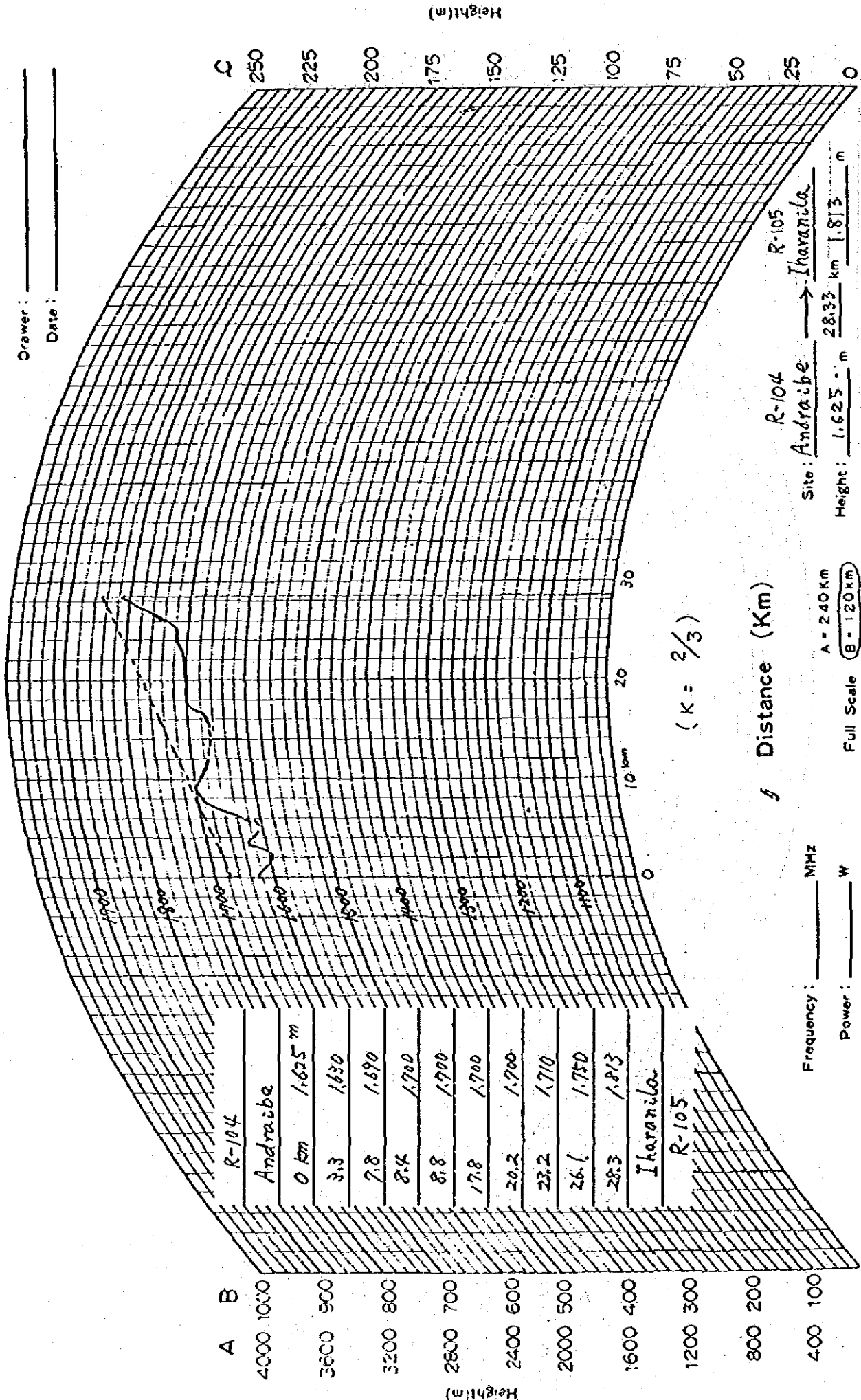


R-103	
Bezaika	
0.401	1.673 m
4.5	1.400
14.0	1.470
16.7	1.360
20.5	1.400
25.6	1.600
29.0	1.300
36.5	1.400
38.2	1.625
Andraibe	
R-104	

$(K = 2/3)$

PATH PROFILE

Name of Route: _____
 No.: (6)
 Drawer: _____
 Date: _____



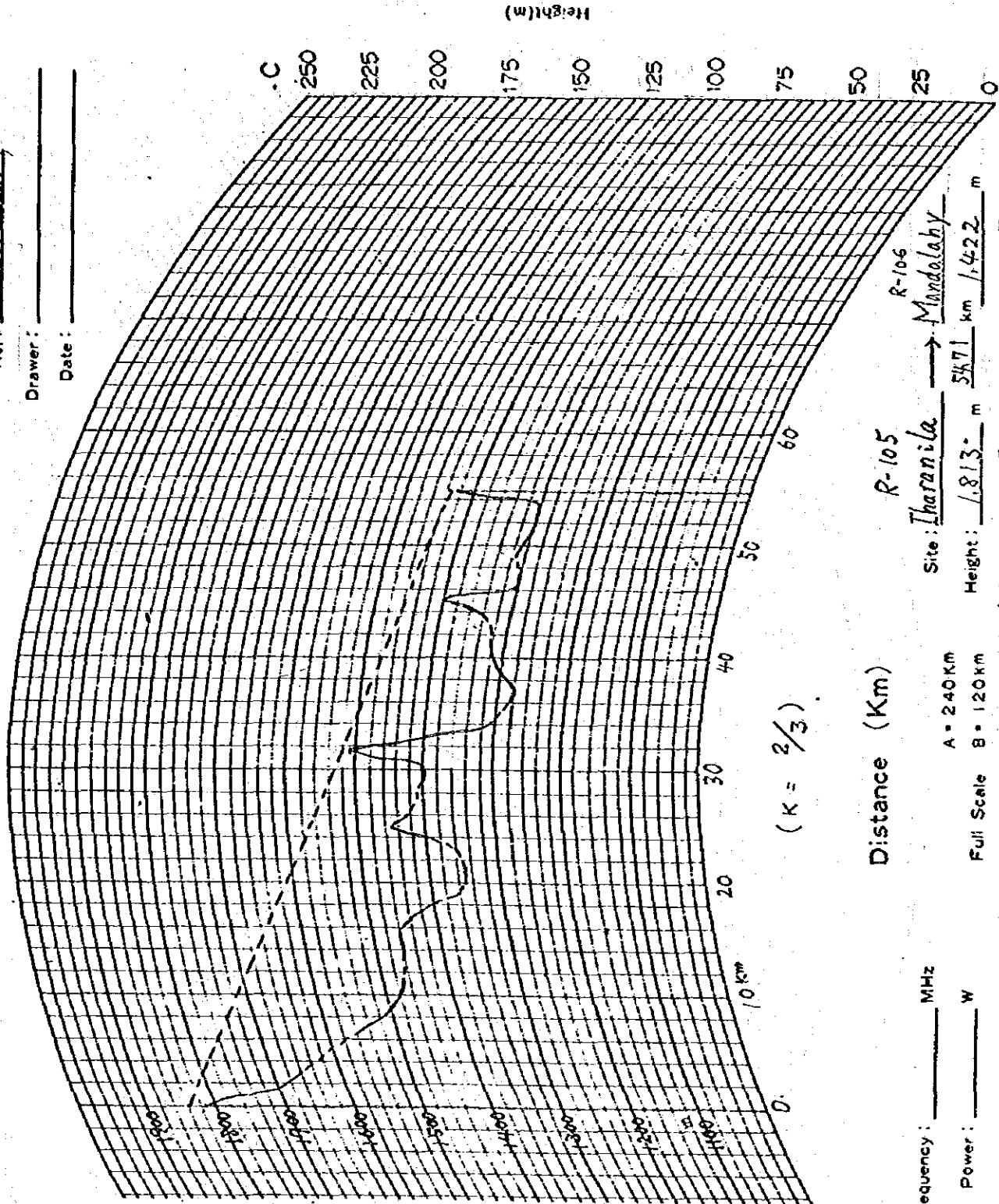
Site: Andraibe → Iharanilo
 R-104 R-105
 Height: 1.625 m 28.33 km 1.813 m
 Antenna height: 50 m 35 m

Frequency: _____ MHz
 Power: _____ W
 Full Scale (B = 120 km)
 A = 240 km
 C = 60 km

$(K = 2/3)$

PATH PROFILE

Name of Route: _____
 No.: (7)
 Drawer: _____
 Date: _____



Distance (km)	Height (m)
0	1813
3.0	1660
10.0	1420
15.3	1460
20.0	1350
25.0	1450
30.2	1400
31.5	1500
33.6	1325
36.7	1280
38.8	1300
45.0	1420
51.0	1300
51.2	1300
53.6	1300
54.7	1422

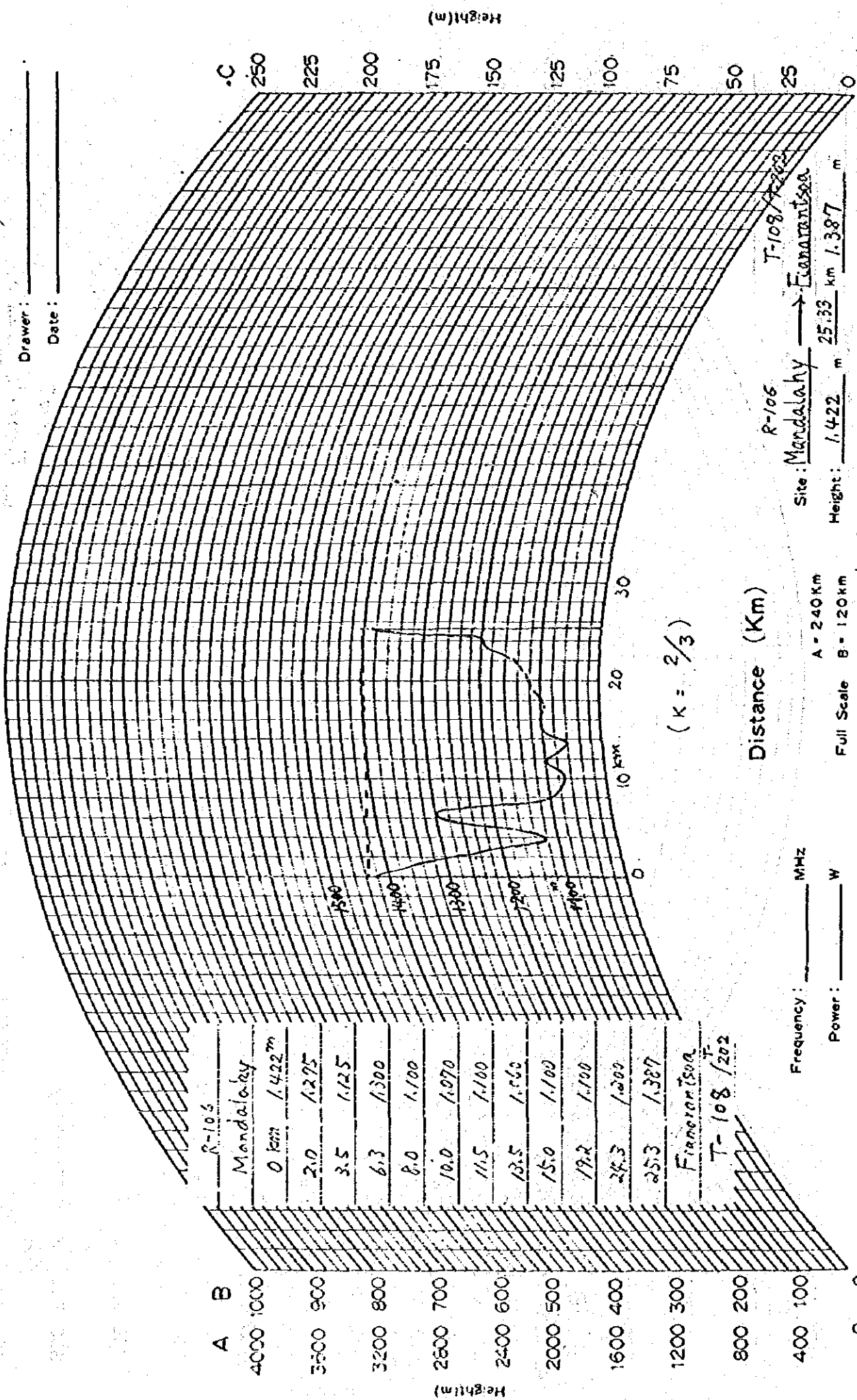
Site: Tharanila → Mandalahy
 Height: 1,813 m
 Antenna height: 25 m

Distance (Km)
 A = 240 Km
 Full Scale B = 120 Km
 C = 60 Km

Frequency: _____ MHz
 Power: _____ W

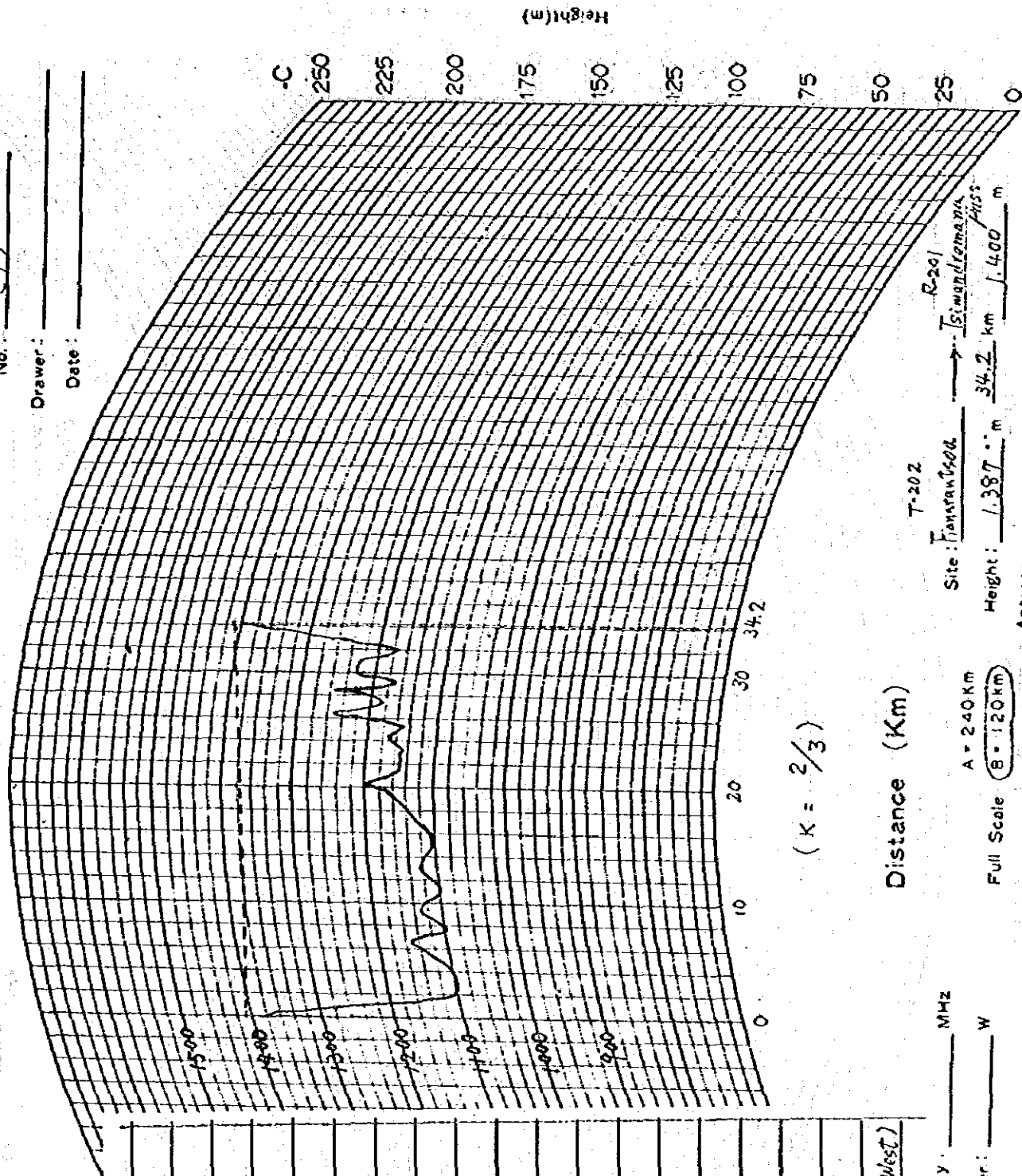
PATH PROFILE

Name of Route: _____
 No. (8) _____
 Drawer: _____
 Date: _____



PATH PROFILE

Name of Route: _____
 No.: (9)
 Drawer: _____
 Date: _____



7-202	
Fiaranantsoa (Hell)	1387 m
0 km	1300
0.5	1100
1.4	1135
5.7	1250
6.6	1100
7.6	1100
8.5	1130
9.3	1100
10.0	1100
11.0	1100
12.0	1130
13.0	1100
16.0	1130
19.5	1170
20.3	1200
22.0	1150
23.0	1150
24.5	1170
25.5	1150
26.3	1250
26.5	1200
27.0	1220
27.5	1170
28.3	1250
29.0	1170
29.5	1200
30.0	1230
30.6	1230
31.0	1220
32.0	1170
32.5	1200
33.0	1270
33.5	1350
34.2	1400
Tsimandremana Pass (West)	

Frequency: _____ MHz
 Power: _____ W

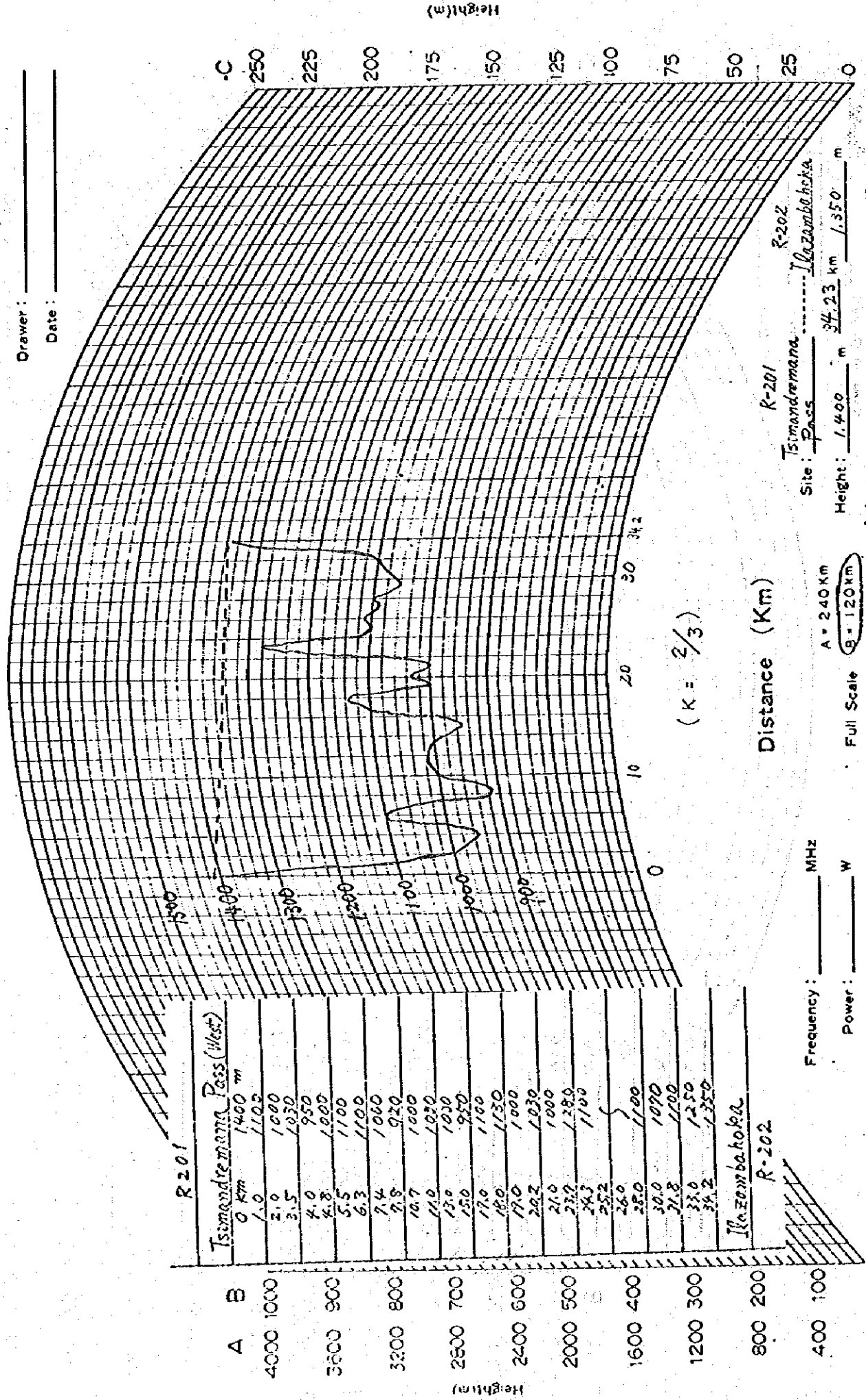
Distance (Km)

A = 240 Km
 Full Scale B = 120 Km
 C = 60 Km

T-202
 Site: Fiaranantsoa → Tsimandremana
 Height: 1387 m
 Antenna height: 20 m
 R-201
34.2 km
1400 m

PATH PROFILE

Name of Route: _____
 No.: (18)
 Drawer: _____
 Date: _____



A	B	Distance (Km)	Height (m)
Tsimandremana Pass (West)			
0	1400	0	1400
1.0	1000	1.0	1100
3.5	1000	3.5	1000
4.0	950	4.0	950
4.8	1000	4.8	1000
5.5	1100	5.5	1100
6.3	1100	6.3	1100
7.4	1000	7.4	1000
7.8	950	7.8	950
10.7	1000	10.7	1000
11.0	1000	11.0	1000
13.0	1000	13.0	1000
15.0	950	15.0	950
17.0	1100	17.0	1100
18.0	1150	18.0	1150
19.0	1000	19.0	1000
20.2	1000	20.2	1000
21.0	1000	21.0	1000
23.0	1200	23.0	1200
24.3	1100	24.3	1100
25.2	1100	25.2	1100
26.0	1100	26.0	1100
28.0	1100	28.0	1100
30.0	1070	30.0	1070
31.8	1200	31.8	1200
33.0	1250	33.0	1250
34.2	1350	34.2	1350
Ilazambelohaka			

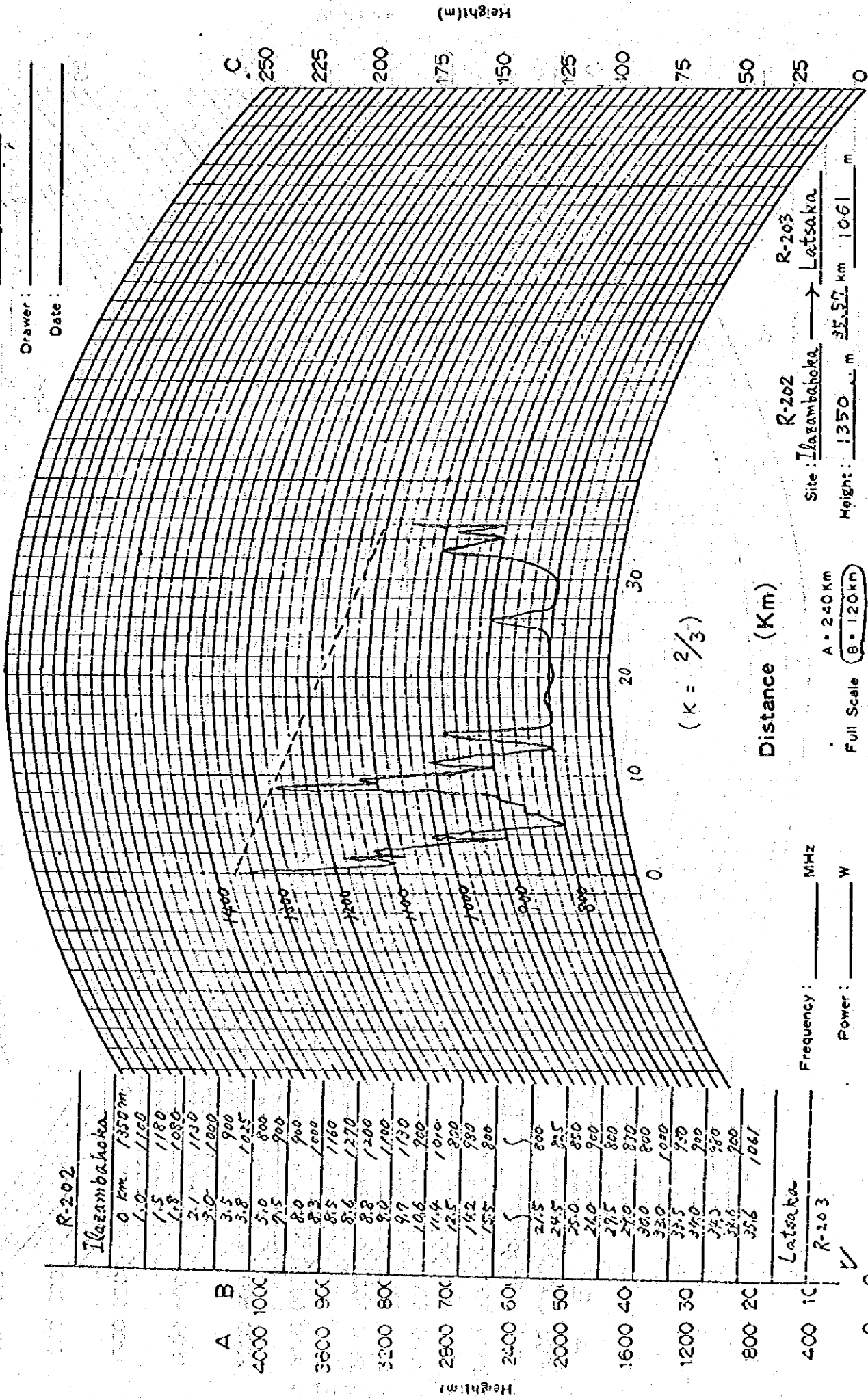
Site: Tsimandremana Pass R-201
Ilazambelohaka R-202
 Height: 1.400 m 34.23 km 1.350 m
 Antenna height: 10 m 10 m

A = 240 Km
 B = 120 Km
 Full Scale
 C = 60 Km

Frequency: _____ MHz
 Power: _____ W

PATH PROFILE

Name of Route: _____
 No.: 611
 Drawer: _____
 Date: _____



Height(m)	Distance (Km)
4000	1000
3600	900
3200	800
2800	700
2400	600
2000	500
1600	400
1200	300
800	200
400	100
0	0

Distance (Km)	Height (m)
0	1350
1.0	1100
1.5	1180
1.8	1080
2.1	1130
3.0	1000
3.5	900
3.8	1015
5.0	800
7.5	900
8.0	900
8.3	1000
8.5	1160
8.6	1270
8.8	1200
9.0	1100
9.7	1130
10.6	200
11.4	1010
12.5	800
14.2	980
15.5	800
21.5	800
24.5	815
25.0	850
26.0	900
27.5	800
28.0	870
30.0	800
33.0	1000
33.5	750
34.0	900
34.3	800
34.6	900
35.6	1061

Frequency: _____ MHz

Power: _____ W

A = 240 Km

Full Scale B = 120 km

C = 60 Km

Distance (Km)

Site: Ilazambahoka → Latsaka
 Height: 1350 m 35.57 km 1061 m
 Antenna height: 20 m 40 m