Nevertheless, to the party responsible for the project implementation aimed at improvement of rural communication network, those benefits are indirect. It is difficult to determine those indirect benefits quantitatively.

Be that as it may, when the contribution to the elevation of national life standard in the Kingdom of Nepal (by way of improvement of national finance, promotion of economic and industrial development, and enhancement of culture) is considered, i.e., from the long-term viewpoint of national economy at large, the current project implementation worthiness can be fully recognized.

The deficiency in fund to finance the initial project construction as well as maintenance and operation, of the system to be realized, can be obviously seen. In other words, the project will produce no short-term return on investment judging from the evaluation made in terms of financial internal rate of return. Therefore, all the necessary costs of the project including running cost are to be provided to the NTC in the forms of Government capital contribution and/or subsidies. The measures thus proposed are indispensable to bringing the project implementation and maintenance to a successful financial position of the operating entity: NTC.

Proposals Concerning Project Implementation

9-2

It requires no elaboration that the financial requirement for construction, operation and maintenance of the projected system should be economized as much as possible.

As the project, this time, is to be implemented in the rural area where telephone service is in the initiatory stage of development and service revenue is generally small, the project implementation and its economic cost and benefit evaluation do not necessarily run parallel, and this can be foreseen to some extent from the outset.

Thus, in the implementation plan, facilities to be introduced are limited to the necessary minimum so as to reduce the project cost to the greatest possible extent.

There no longer remains room for further broad cost reduction. Following are the means for a more or less curtailment of initial investment:

(1) Shortening of Service Hours

The equipment procurement and installation plan is based on the assumption that the public call office hours for public telephone and telegram services be 12 hours/day. Service hours for important subscribers, to whom 24 hours/day service was initially determined, are also to be reduced to 12 hours/day.

This plan is not exactly pertinent because the important subscribers are administrative offices, police stations and other public organizations so that the reduced public call office service hours may be impedimental to remedial actions during emergency. Nevertheless, the 12 hours/day service is much better than the existing one hour or so per day service by H.F. radio system.

(2) Shortening of Storage Battery Holding Time of Solar Cell System

For the sites where the solar cell system is to be adopted, the storage battery holding time is designed to be 15 days. This is the safety design time because all the necessary basic data for design could not be obtained. In the systems presently scheduled to be constructed by World Bank financed projects, the storage battery holding time of the solar cell system is set at 10 days. Therefore, in a certain areas, the storage battery holding time of 10 days or so is considered to be sufficient the application of 10 days storage battery holding time to all the objective sites of the current project is impractical.

The selection of sites where to apply 10 days storage battery holding time depends upon the detail system design yet to be prepared. It is estimated, however, that at half the total number of sites the storage battery holding time can be reduced from 15 to 10 days.

#### (3) Reduction of Project Size

It is proposed that the whole project be divided into four phases for the purpose of phase by phase implementation. The 17 locations to be covered by Phase IV are in remoter areas that the locations to be covered by Phases I-III so that the work cost is higher in both construction and maintenance/operation aspects.

Thus, for those 17 locations, an alternative plan can be considered, and that is to re-use the H.F. radio facilities to be withdrawn after the completion of Phases I-III work. Although such H.F. radio facilities lack in stable and reliable performance, the construction and maintenance/operation cost can be a great deal lower than in the case of digital radio system to be adopted, in principle, in the current project. Furthermore, by reducing the number of site locations, service hours per site can be more or less increased than at present.

- 209 -

The foregoing cost curtailment proposals will bring down the initially estimated project cost as under.

(Unit: Million yen)

	<u>Phase I</u>	<u>Phase II</u>	<u>Phase III</u>	Phase IV	•
Alternative Plan	2,328	2,249	2,848	0	. '
Original Plan	(2,376)	(2,295)	(2,929)	(1,840)	
Balance	-48	-46	-81	-1,840	

 (4) Change of Independent Exchange Introduction Timing In accordance with the Scope of Work, independent exchanges are planned, in the original plan, to be introduced for 3 sites, Tulsipur, Ghorahi and S. Doti, at the initial stage.

If, however, public call offices are set up at these sites at the initial stage and independent exchange introduction is postponed to some time in the future, the initial cost can be reduced to some extent.

In the following is given the project cost estimate when this alternative plan only is adopted.

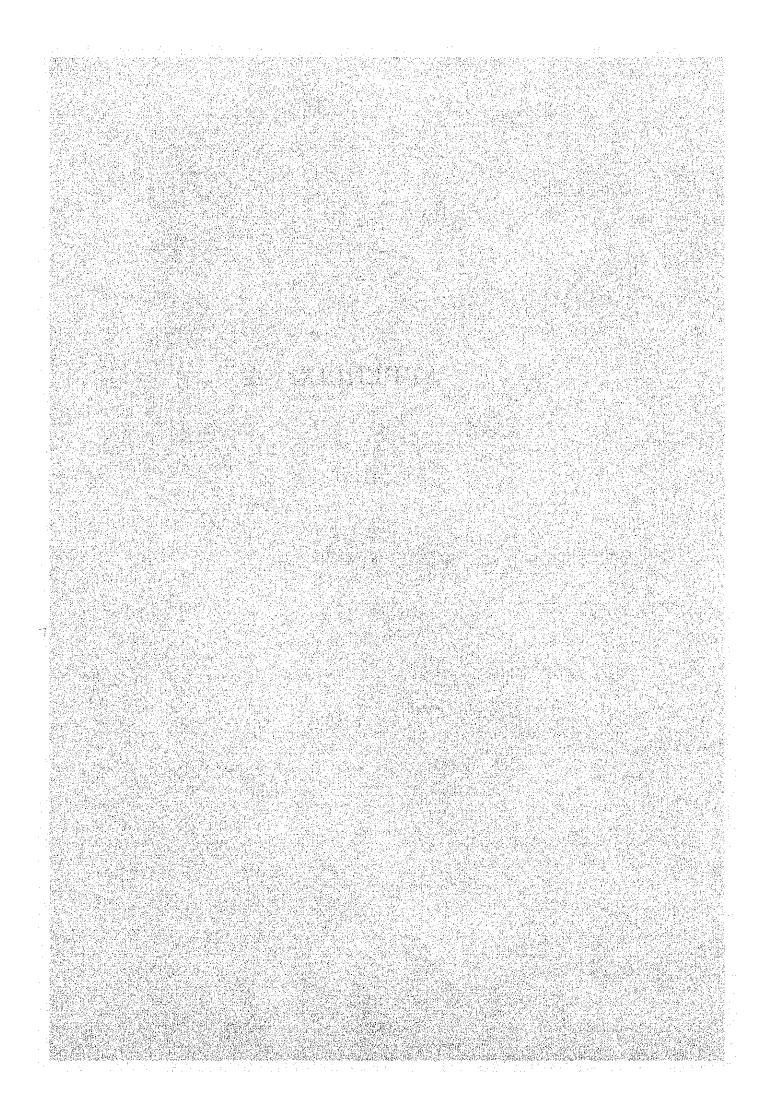
		(Unit: Mil	lion yen)
<u>Phase I</u>	<u>Phase II</u>	<u>Phase III</u>	<u>Phase IV</u>
Alternative Plan 2,376	2,102	2,744	1,840
Original Plan (2,376)	(2,295)	(2,929)	(1,840)
Balance -	-193	-185	

Anynow, these alternative plans, (1) through (4), can realize only a small amount of cost reduction. Therefore, even by the alternate plans, the internal rate of return from the current project implementation does not differ substantially from that by the original plan. Nevertheless, when the project implementation finance is analyzed, the necessity for cost reduction to the possible minimum remains undeniable. Thus, for project implementation, the alternate plans also are worth full consideration.

211 -

# APPENDIX A

 $G_{i}$ 



# Elevation and Coordinates of Station Site (OI Area)

L.	Cita Mana		Coordi	nates
No.	Site Name	Elevation - (m)	Longitude	Latitude
1	KATHMANDU	1305	85°18′57"E	27° 41′ 45″N
S	KAKANI	2066	85° 16 11"E	27° 48′ 45" N
З	SAHUGAON	1250	85°09'35"E	27°58'35"W
4	BIDUR	579	85°08′40″E	27°54′49″N
5	DANGA	2134	85°12'49"E	28°05'29"N
6	рнинсне	2073	85°17'51"E	28°06143"N
7	ZINC MINING TOWN	4572	85°11'24"E	28°14/01"N
8	THAMUBHANJYANG	2033	85°06113"E	27°42′22"N
9	DHADING	1494	84°55′20″E	27°52′04"N
10	NAGARKOT	2164	85°31'21"E	27°41/33"N
<b>i i</b>	HELAMBU	1737	85°32′14"E	27"55'34"N
12	MAIHAR	1280	85°38'21"E	27°41'37"N
13	CHAUTARA	1402	85°43′00″E	27° 467 24 "N
14	РАНСНКНАL	834	85°37′43″E	27°39′34″H

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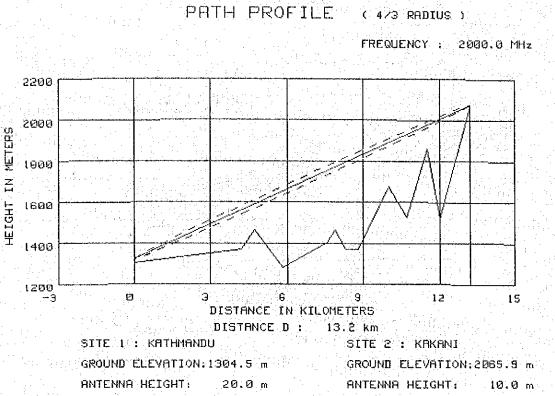
# Path Profile Maps (Ol Area)

- A4 -

1		
Т	Kathmandu -	Kakani
2	Kakani -	Sahugaon
3	Sahugaon -	Bidur
4	Sahugaon -	Danga
5	Danga -	Dhunche
6	Danga -	Zinc Mining Town
7	Kakani -	Thamubhanjyang
8	Thamubhanjyang -	Dhading
9	Kathmandu -	Nagarkot (Covered by another project)
10	Nagarkot -	Helambu
11	Nagarkot -	Maihar
12	Maihar -	Chautara
13	Maihar -	Panchkhal

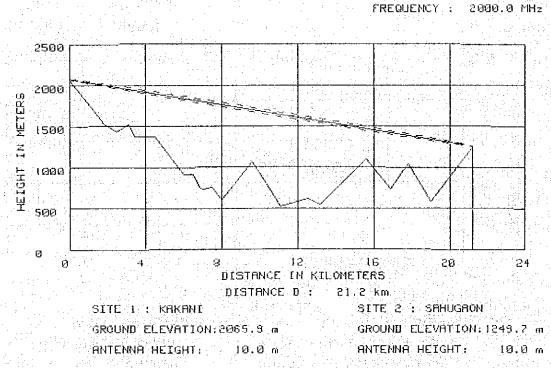


KAKSAH



(01-2)

PATH PROFILE ( 4/3 RADIUS )



– A5 –

(01-1)

#### PATH PROFILE (4/3 RADIUS)

(01-3)

FREQUENCY : 2000.0 MHz 1800 1500 METERS 1200 Z HE LGHT 900 600 -5 200 10 Θ 2 6 8

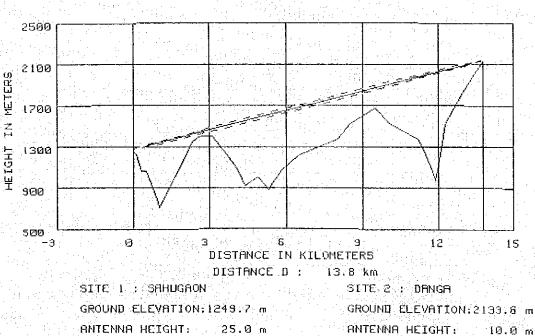
DISTANCE IN KILOMETERS

DISTRNCE D : 7.1 km SITE 1 : SAHUGAON SITE 2 : BIDUR GROUND ELEVATION: 1249.7 m GROUND ELEVATION: 579.1 m ANTENNA HEIGHT: 10.0 m ANTENNA HEIGHT: 15.0 m



PATH PROFILE (4/3 RADIUS ) FREQUENCY : 2000.0 MHz

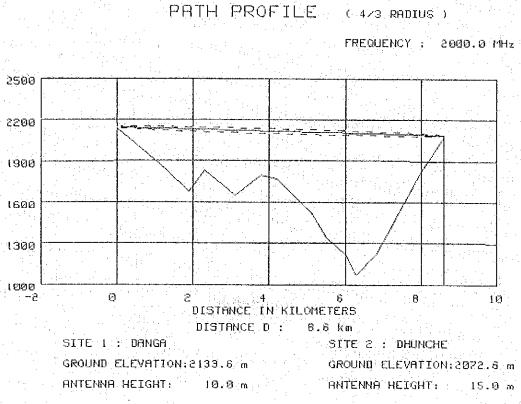
(01-4)



ANTENNA HEIGHT:

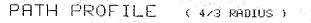
- A6 -

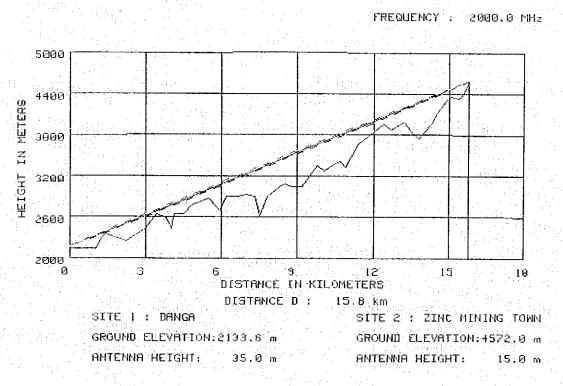
HEIGHT IN METERS

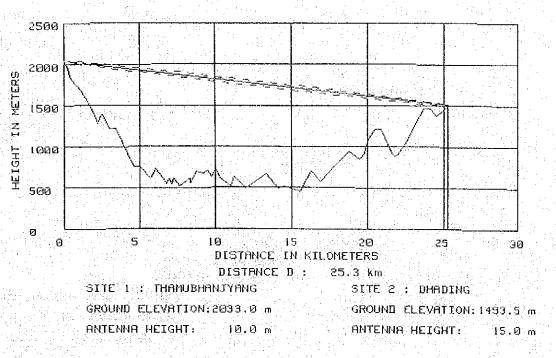


DANZIN

(01-6)







- A8 -

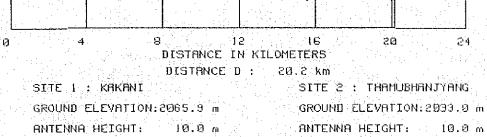
FREQUENCY : 2000.0 MHz

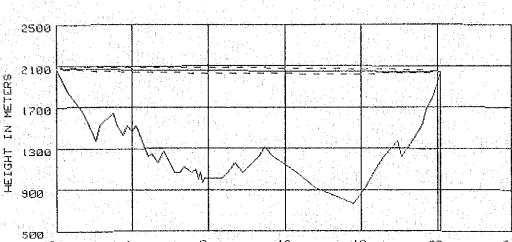
PATH PROFILE ( 4/3 REDIUS )

THADHA

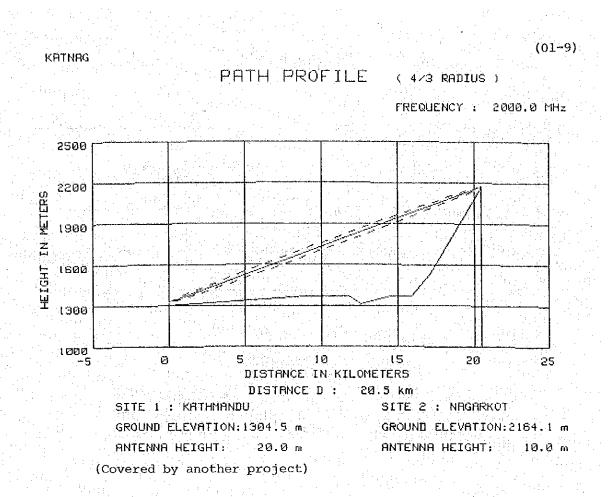
KAKTHA

(01-8)



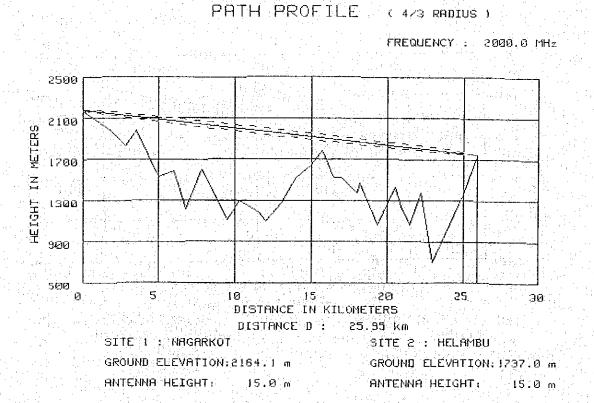


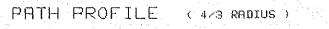
FREQUENCY : 2000.0 MHz



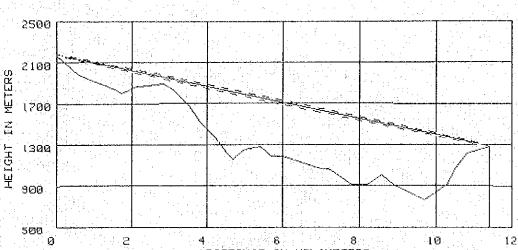


(01-10)









DISTANCE IN KILOMETERS

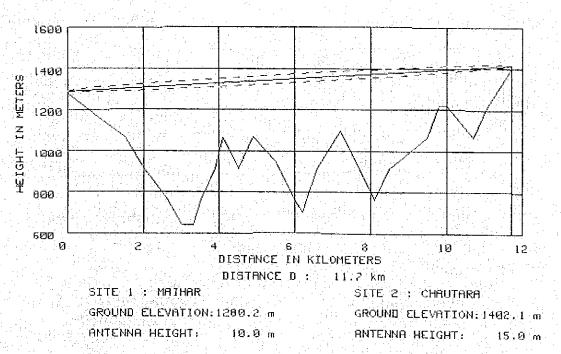
DISTANCE D: 11.4 km SITE 1: NAGARKOT GROUND ELEVATION:2164.1 m GROUND ELEVATION:1280.2 m ANTENNA HEIGHT: 15.0 m ANTENNA HEIGHT: 10.0 m

MAICHA

(01-12)

#### PATH PROFILE ( 4/3 RADIUS )

FREQUENCY : 2000.0 MHz

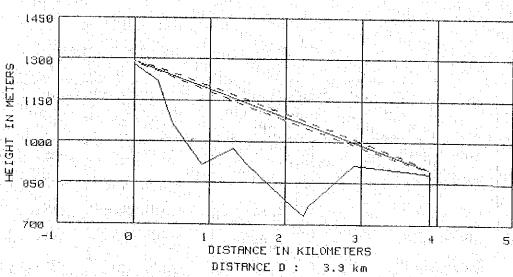


- Al0 -

#### (01-13)

#### PATH PROFILE (4/3 RADIUS)

FREQUENCY : 2000.0 MHz



MAIPAN

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SITE 1 : MAIHAR GROUND ELEVATION:1200.2 m ANTENNA HEIGHT: 10.0 m ANTENNA HEIGHT: 10.0 m

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eregiai Alterna	Elevation and	Coordinates of	Station Site	(02 Area)
۰۰۰۰ کېږ				
			Coordi	nates
No.	Site Name	Elevation (m)	Longitude	Latitude
1	BIRÁTNAGAR	70	87°17′19"E	26°27′45″N
2	MUREBAS	1966	87°30′07"E	26°52′20"N
3	ТЕКНАТНИМ	1646	87°32′20"E	27° 07′ 28" N
4	GHAMPETOLE	1768	87°17′05″E	26°59′42"N
5	BHOJPUR	1585	87"03'12"E	27°10′15"N
6	RAMCHE	1829	87°16 00"E	27°03′42"N
7	CHAINPUR	1280	87°18′57"E	27° 17′ 26" N
8	KHANDBARI	1067	87° 12′36"E	27°22′16"N
9	BHADRAPUR	118	88°05′25"E	26°32′19°N
10	JHAFA	76 (1)	87°51′45″E	26°28′45"N
11	AITABARE	1737	88°01/58"E	26°53′04"N
÷.	ILAM	1402	87°55′33"E	26° 55′ 20" N
12				

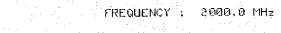
#### Path Profile Maps (02 Area)

1	Biratnagar	Murebas
2	Murebas -	Terhathum
3	Murebas -	Ghampetole
4	Ghampetole -	Bhojpur
5	Ghampetole -	Ramche
6	Ramche -	Chainpur
7	Chainpur -	• Khandbari
8	Bhadrapur -	Jhapa
9	Bhadrapur -	- Aitabare
10	Aitabare	- Ilam
11	Ilam -	- Chhintapu
12	Chhintapu	- Phidim
13	Phidim	• Taplejung

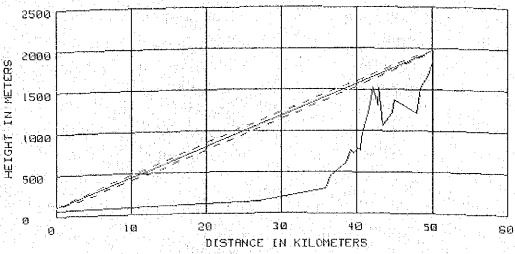
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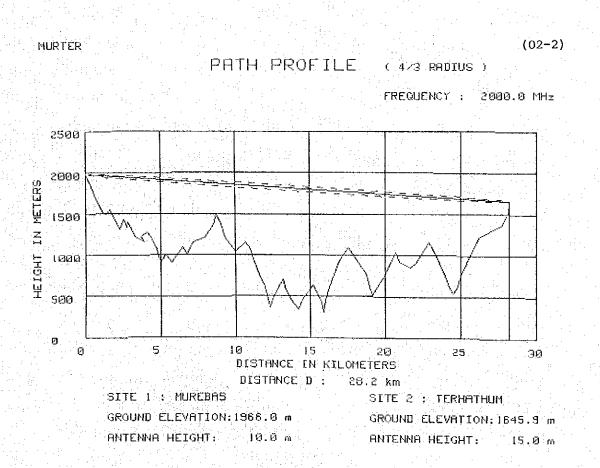
### PATH PROFILE (4/3 RADIUS)



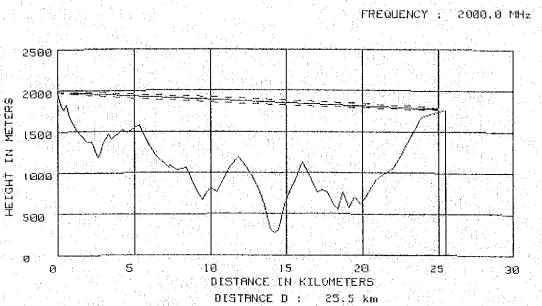
(02-1)



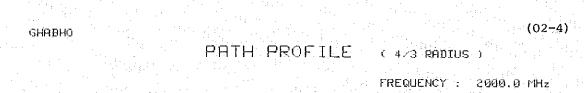
DISTANCE D : 50.2 km SITE 1 : BIRATNAGAR SITE 2 : MUREBUS GROUND ELEVATION: 70.1 m GROUND ELEVATION: 1966.0 m ANTENNA HEIGHT: 30.0 m ANTENNA HEIGHT: 10.0 m

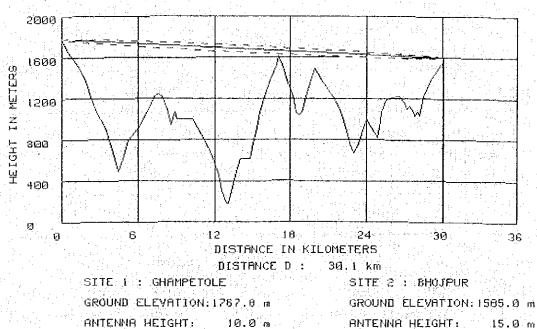






SITE 1 : MUREBAS SITE 2 : GHAMPETOLE GROUND ELEVATION: 1966.0 m GROUND ELEVATION: 1267.8 m ANTENNA HEIGHT: ANTENNA HEIGHT: 10.0 m 10.0 m

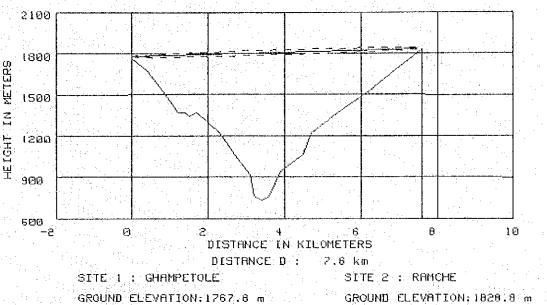




(02-6)

#### PATH PROFILE (4/3 RADIUS )

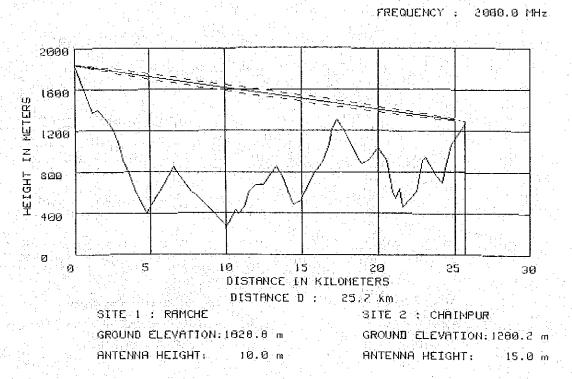
FREQUENCY : 2000.0 MHz



ANTENNA HEIGHT: 10.0 m ANTENNA HEIGHT: 10.0 m

RAMCHA

PATH PROFILE ( 4/3 RADIUS )



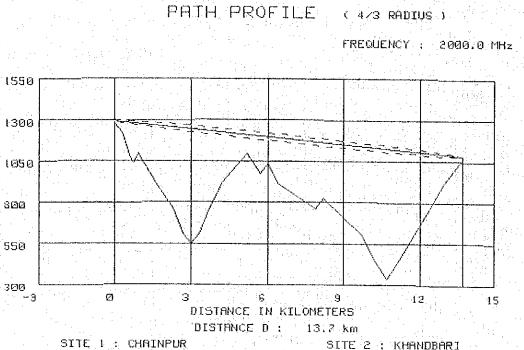


METERS

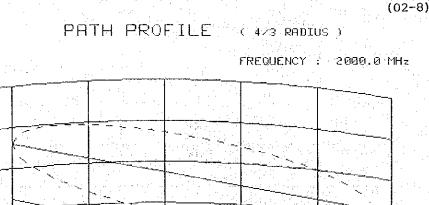
IN I

HEIGHT









15

20

SITE 2 : JHAPA

GROUND ELEVATION:

ANTENNA HEIGHT:

25

78.0 m

40.0 m

BHÁJHA

200

170

140

110

80

้รย ~5

HEIGHT IN METERS

A17 -

40.0 m

10

DISTANCE IN KILOMETERS DISTANCE D : 23.7 km

5

Ø

ANTENNA HEIGHT:

SITE 1 : BHAORAPUR

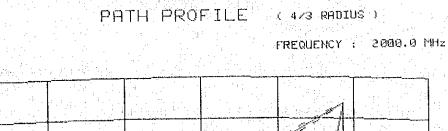
GROUND ELEVATION: 118.0 m

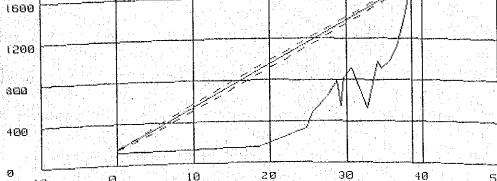
2000

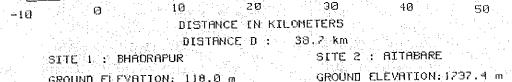
NETERS

N

HEIGHT





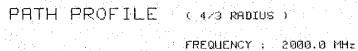


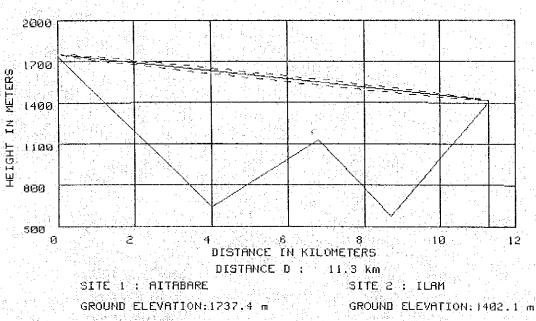


AITEILA

(02-10)

(02-9)



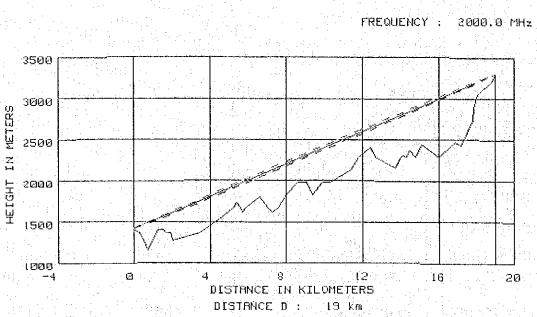


ANTENNA HEIGHT: 15.0 m ANTENNA HEIGHT: 15.0 m

Z

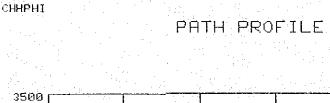
HEIGHT

Z



PATH PROFILE

SITE 1 : ILAM SITE 2 : CHHINTAPU GROUND ELEVATION: 1402.1 m GROUND ELEVATION:3291.8 m ANTENNA HEIGHT: 15.0 m ANTENNA HEIGHT 10.0 m

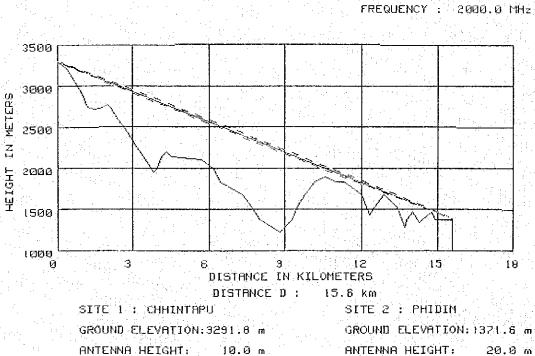


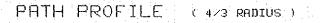


(02 - 11)

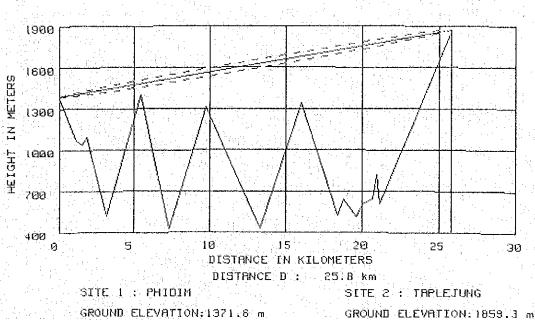
( 4/3 RADIUS )

( 4/3 RRDIUS )









ANTENNA HEIGHT: 15.0 m ANTENNA HEIGHT: 15.0 m

				Coordinates		nates
No.	Site Name	Elevation (m)	Longitude	Latitude		
1	RAJBIRAJ	76	86° 45709"E	26°32*44"N		
2	ROTAHA	1946	86°41'28"E	26° 55′ 48″N		
3	GAIGHAT	152	86" 42′04 "E	26°48′15"N		
4	GURANSE	2195	86° 46′ 35″ E	27°14′27"N		
5	DIKTEL	1539	86° 47159 "E	27°12'59"N		
6	KABRE	1798	86°39142"E	27°12′18"N		
7	OKHALDHUNGA	1798	86°30′34"E	27"19'18"N		
8	RUMJHATAR	1387	86°32′45″E	27°18′12"N		
9,	JANTRA KHANI	3063	86°32′29"E	27"23/17"N		
10	SALLERI	2469	86°35/36"E	27°30'13"N		
11	SATUNG	3551	86°34′31″E	27°34/38"N		
12	JUBING	2926	86°43′13"E	27°35′05"N		
13	NAMCHE BAZAR	3566	86° 42′ 53″ E	27∎48723"N		

- ?

Elevation and Coordinates of Station Site (03 Area)

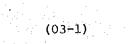
#### Path Profile Maps (03 Area)

	+	~ ~	110,00 (00 11204)
1	Rajbiraj	-	Rotaha
2	Rotaha		Gaighat
3	Rotaha	-	Guranse
4	Guranse	- 	Diktel
5	Guranse		Kabre
6	Kabre		Okhaldhunga
7	Okhaldhunga	<b>e</b>	Rumjhatar
8	Kabre	-	Jantra Khani
9	Jantra Khani		Salleri
10	Salleri		Satung
11	Satung	- :	Jubing
12	Jubing	-	Namche Bazar

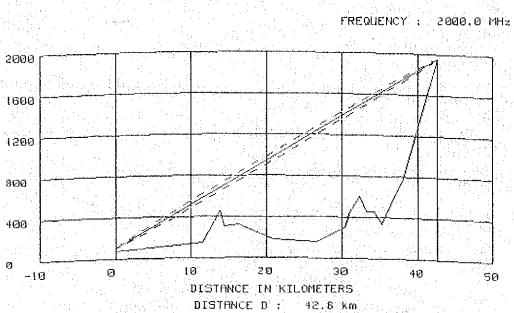
METERS

л Ц

HETCHT



( 4/3 RADIUS )



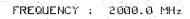
PATH PROFILE

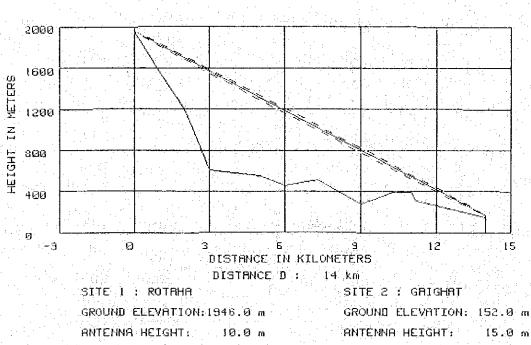
SITE 1 : RAJBIRAJ GROUND ELEVATION: 76.2 m GROUND ELEVATION: 1946.0 m ANTENNA HEIGHT: 30.0 m ANTENNA HEIGHT: 10.0 m

ROTGRI

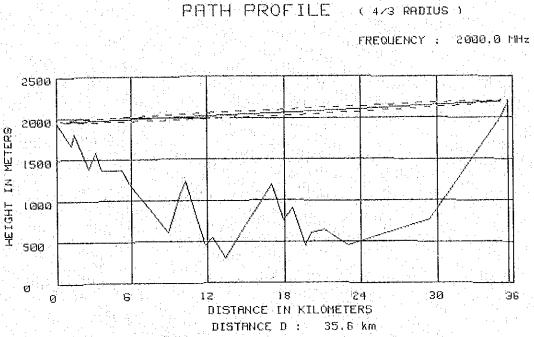
(03-2)

PATH PROFILE ( 4/3 RADIUS )









SITE 1 : ROTAHA GROUND ELEVATION:1946.0 m GROUND ELEVATION:2195.0 m ANTENNA HEIGHT: 10.0 m ANTENNA HEIGHT: 10.0 m

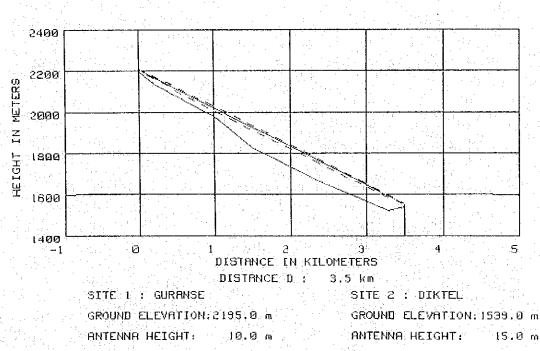
GURDIK

ROTGUR

(03-4)

PATH PROFILE ( 4/3 RADIUS )

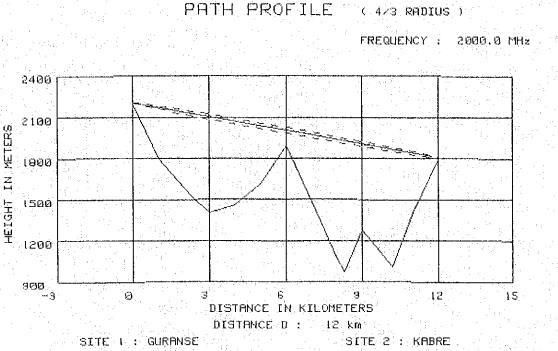
FREQUENCY : 2000.0 MHz



A24



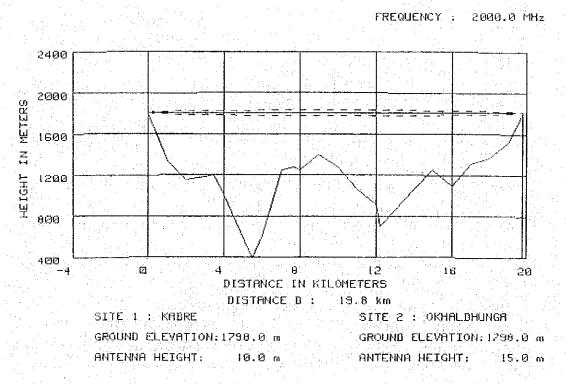
(03-6)



GROUND ELEVATION:2195.0 m GROUND ELEVATION:1298.0 m ANTENNA HEIGHT: 10.0 m ANTENNA HEIGHT: 10.0 m

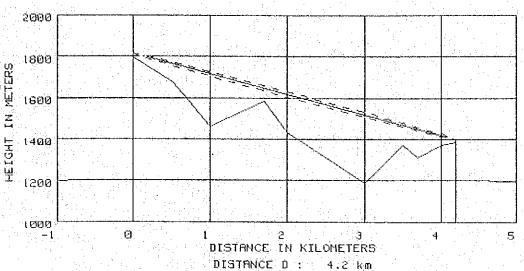


PATH PROFILE ( 4/3 RADIUS )



#### PATH PROFILE ( 4/3 RADIUS )

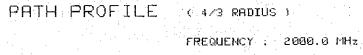
FREQUENCY : 2000.0 MHz

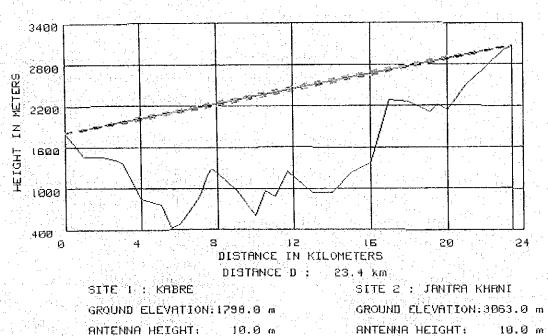


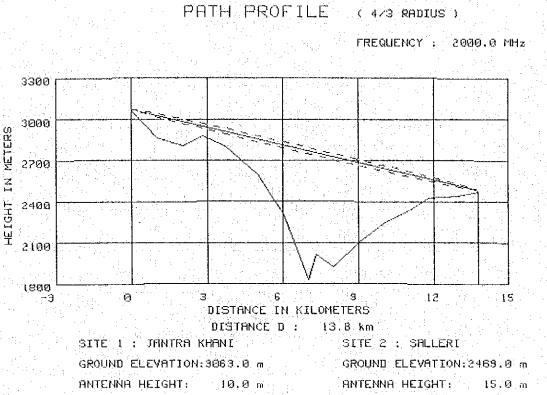
SITE 1 : OKHALDHUNGA SITE 2 : RUMJHATAR GROUND ELEVATION:1798.0 m GROUND ELEVATION:1307.0 m ANTENNA HEIGHT: 15.0 m ANTENNA HEIGHT: 15.0 m

KABIRN

(03-8)

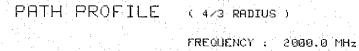


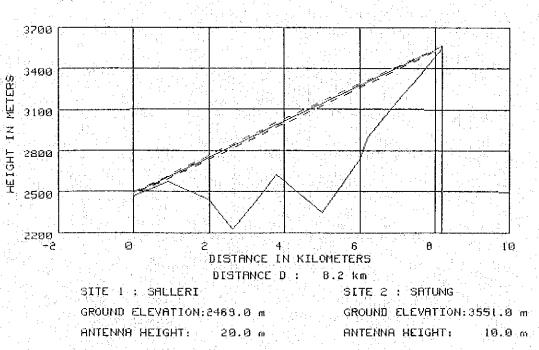


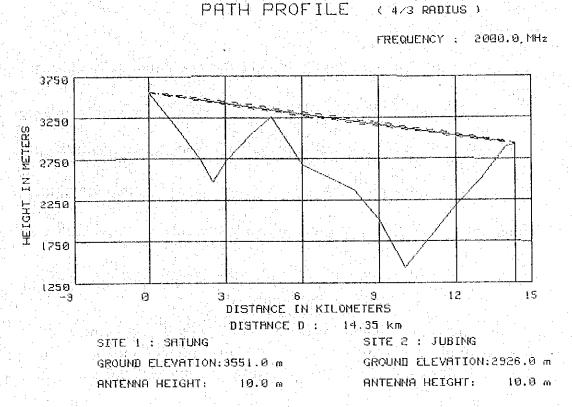


SALSAT

(03-10)

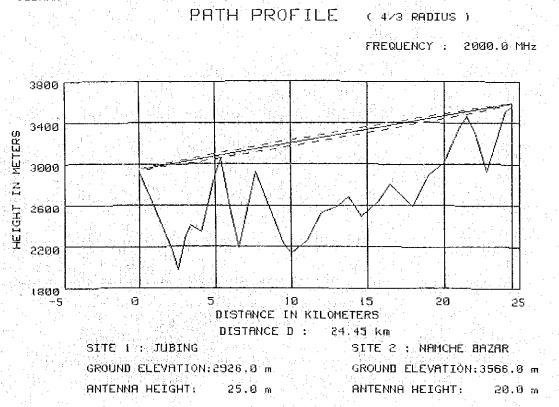






TUBNAM

(03-12)



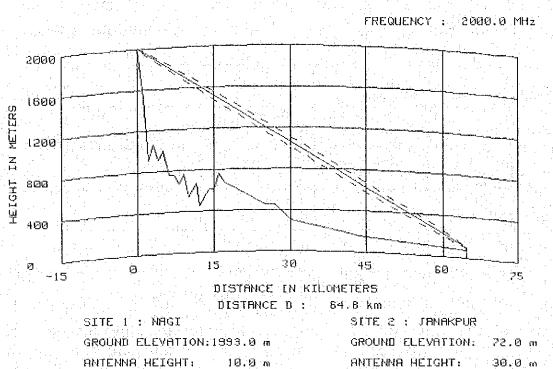
				Coordinates		
No.	Site Name	Elevation (m)	Longitude	Latitude		
1	JANAKPUR	72	85°56′12"E	26°43′45"N		
2	NAGI	1993	85° 55′ 53" E	27°18′47″N		
3	SINDHULI MADI	518	85°55′05"E	27"12'39"N		
4	RAMECHHAP	1463	86°05′15"E	27°19′12″N		
5	CHARIKOT	2012	86°02′59"E	27°40′03"N		

-7

Elevation and Coordinates of Station Site (04 Area)

## Path Profile Maps (04 Area)

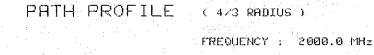
1	Nagi -	Janakpur
2	Nagi -	Sindhuli Madi
3	Nagi -	Ramechhap
4	Ramechhap -	Charikot

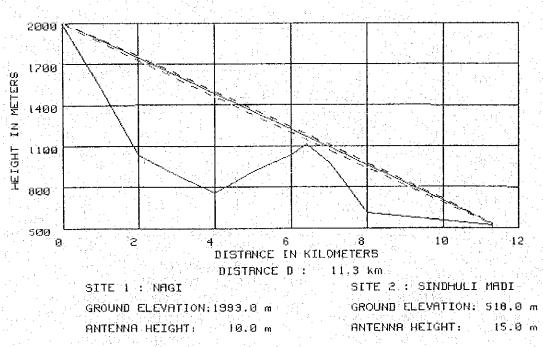


PATH PROFILE (4/3 RADIUS)

NRGSIN

(04-2)

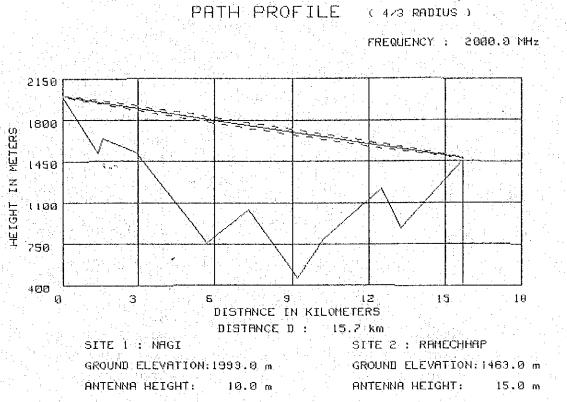


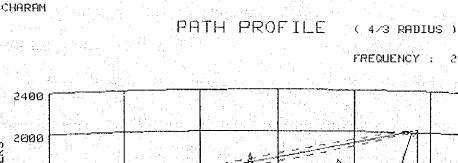


- A31 -

METERS

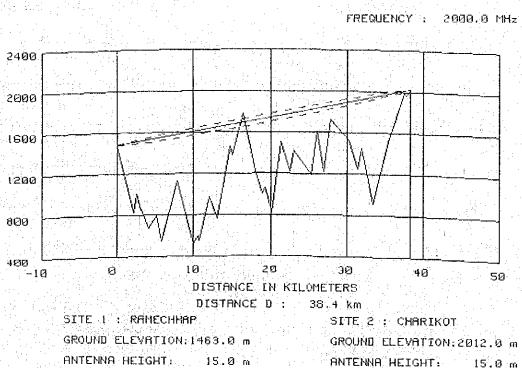
HEIGHT IN











No.	Site Name	Elevation	Coordi	nates
		(m)	Longitude	Latitude
1	BIRGANJ	88	84°52′42″E	27°01′01″N
2	SIMRA	145	84°59′05″E	27° 10′23″N
a 3.	KALAIYA	94	85°00 11"E	27°01/57"N
4	GAUR	76	85°16′56″E	26°45′59"N
5	HITAUDA	448	85°01′51"E	27*25/57"N
6	SHIMBHANJYANG	2581	85° 05′ 25″ E	27"35'37"N
7	BASANTI	1554	85°07′31″E	27"31'32"N
8	BHIMPHEDI	1067	85°07'32"E	27•3242"N

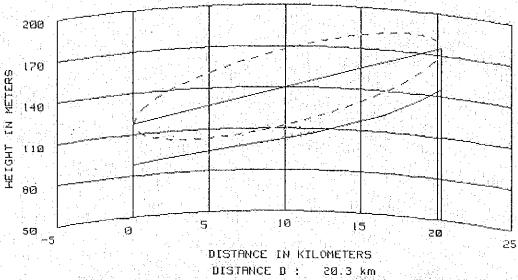
Elevation and Coordinates of Station Site (05 Area)

## Path Profile Maps (05 Area)

1	Birganj -	Simra
2	Birganj -	Kalaiya
3	Kalaiya -	Gaur
4	Shimbhanjyang -	Hitauda
5	Shimbhanjyang -	Basanti
6	Basanti -	Bhimphedi

#### PATH PROFILE ( 4/3 RADIUS )

FREQUENCY : 2000.0 MHz



SITE 1 : BIRGANJ	SITE 2 : SIMRA
GROUND ELEVATION: 88.0 m	GROUND ELEVATION: 145.0 m
ANTENNA HEIGHT: 30.0 m	ANTENNA HEIGHT: 30.0 m

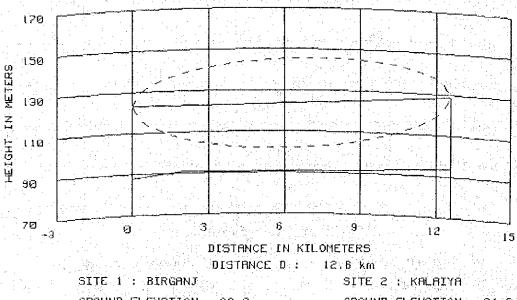
BIRKAL

(05-2)

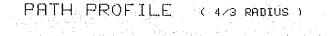
(05-1)

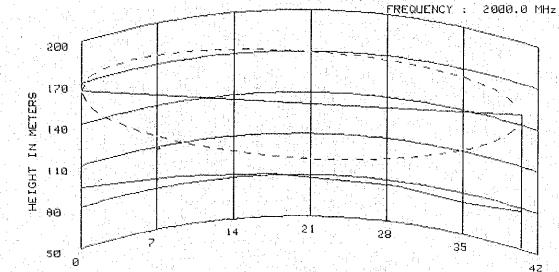
#### PATH PROFILE (4/3 RADIUS)

FREQUENCY : 2000.0 MHz



GROUND ELEVATION: 88.0 m GROUND ELEVATION: 94.0 m ANTENNA HEIGHT: 95.0 m ANTENNA HEIGHT: 95.0 m



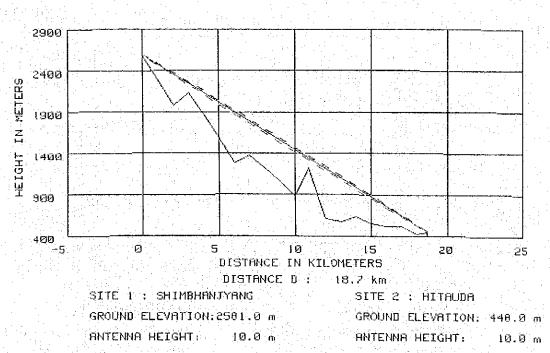


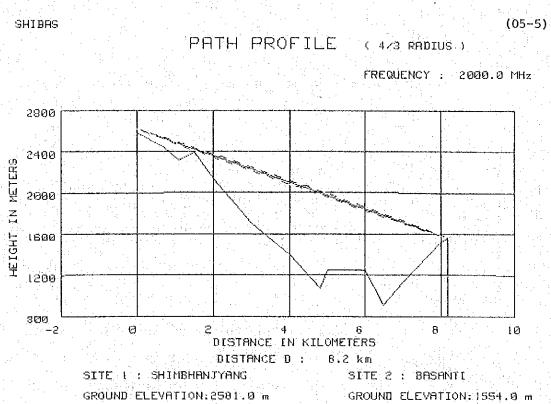
DISTANCE IN KILOMETERS DISTANCE D : 40.4 km SITE 1 : KALAIYA GROUND ELEVATION: 94.0 m GROUND ELEVATION: 76.0 m ANTENNA HEIGHT: 70.0 m ANTENNA HEIGHT: 70.0 m

SHIHIT

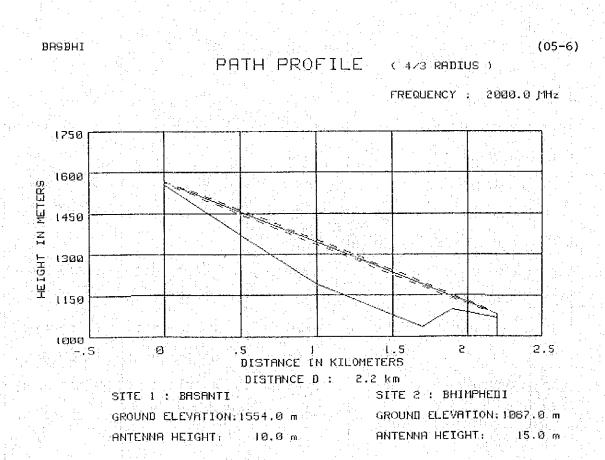
(05-4)

PATH PROFILE ( 4/3 RADIUS ) FREQUENCY : 2000.0 MHz





RNTENNA HEIGHT: 35.0 m BNTENNA HEIGHT: 10.0 m



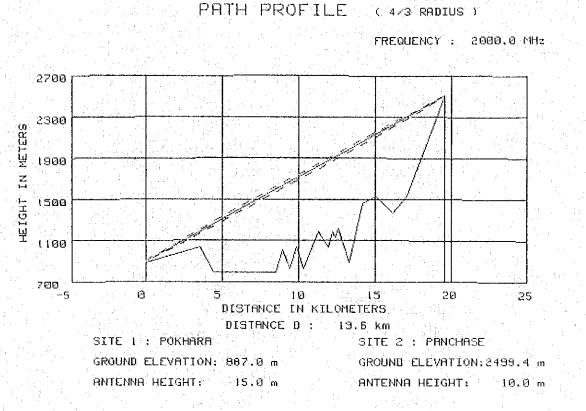
No.	Site Name	Elevation (m)	Coordinates			
			Longitude	Latitude		
1	POKHARA	887	83°59′55"E	28° 13′ 17" N		
2	FANCHASE	2499	83° 47^58"E	28° 13′ 46" N		
3	SYANGJA	853	83°52′18″E	28° 05′ 55″ N		
4	KUSMA	914	83°41′04"E	28°13′13″N		
5	BAGLUNG	945	83°36′10"E	28° 15750"N		
6	SALYAN	1097	83°36'16"E	28° 19700"N		
7	BENI	853	83°34706″E	28° 20136" N		
8	RAKHU	1829	83°34′38″E	28°24′14"N		
9	TOPANG	2774	83°41′04"E	28° 29' 08" N		
10	DHAMPUGAON	2957	83°36′21″E	28°39′47″N		
11	DHUMPHA	2896	83°42′09″E	28° 45′21 "N		
12	JOMSOM	2774	83°44′14"E	28° 46′ 58″ N		
13	MARJYANKOT	1085	84°09′16"E	28°06139"N		
14	JITAKOT	1311	84°19′55"E	28° 05′ 32"N		
15	SANKHAR	511	84°16′06"E	27° 59′ 00" N		
16	DAMAUL I	335	84°16′58″E	27° 58′ 20" N		
17	BANDIPUR	1158	84°24′11"E	27°56′06"N		
18	GORKHA	1097	84°37′10"E	28°00′05″N		
19	GHALEGAON	2499	84 <b>°</b> 21 21"E	28" 19103"N		
20	BESISHAR	671	84°23′25"E	28°13′43"N		
21	СННІЈИ	2164	84°25′29"E	28°23′40″N		
22	THONJE	2743	84°21′53″E	28"28'36"N		
23	BAGARCHHAP	2591	84°21′00"E	28° 33'00"N		
24	CHRME	2621	84°14′41"E	28°33′05"N		

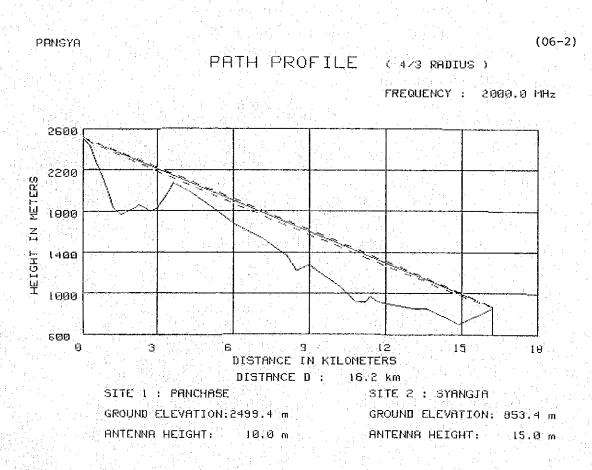
#### Elevation and Coordinates of Station Site (06 Area)

## Path Profile Maps (06 Area)

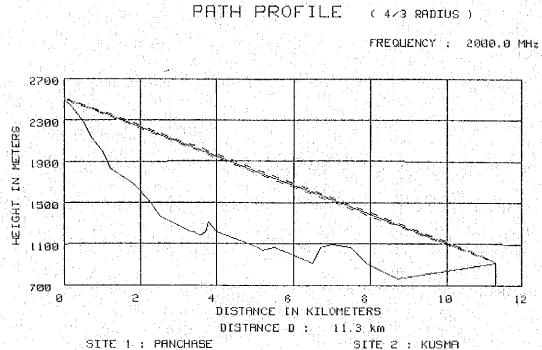
		Maps (00 Area)
1	Pokhara -	Panchase
2	Panchase -	Syangja
3	Panchase -	Kusma
4	Kusma -	Baglung
5	Baglung -	Salyan
6	Salyan -	Beni
7	Beni -	Rakhu
8	Rakhu -	Topang
9	Topang -	Dhampugaon
10	Dhampugaon -	Dhumpha
11	Dhumpha -	Jomsom
12	Pokhara -	Marjyankot
13	Marjyankot -	Jitakot
14	Jitakot -	Sankhar
15	Sankhar -	Damauli
16	Jitakot -	Bandipur
17	Bandipur -	Gorkha
18	Jitakot -	Ghalegaon
19	Ghalegaon -	Besishar
20	Ghalegaon -	Chhiju
21	Chhiju -	Thonje
22	Thonje -	Bagarchhap
23	Bagarchhap -	Chame

-?





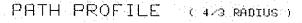


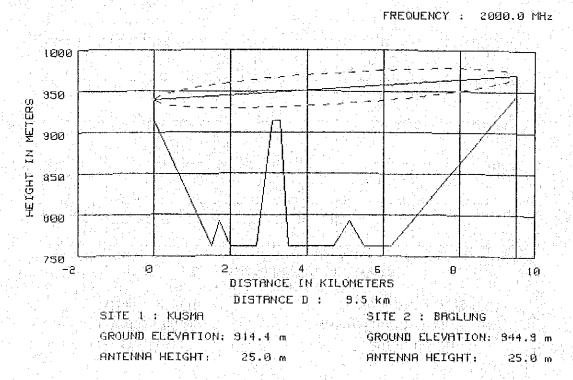


GROUND ELEVATION:2499.4 m GROUND ELEVATION: 914.4 m ANTENNA HEIGHT: 10.0 m ANTENNA HEIGHT: 15.0 m

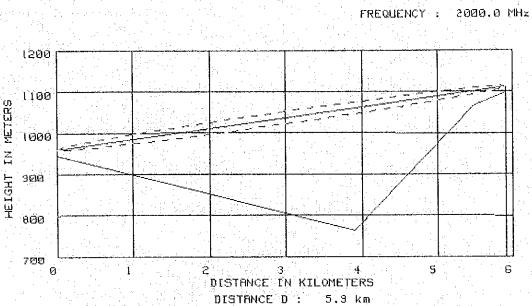


KUSBRG





#### PATH PROFILE ( 4/3 RADIUS )



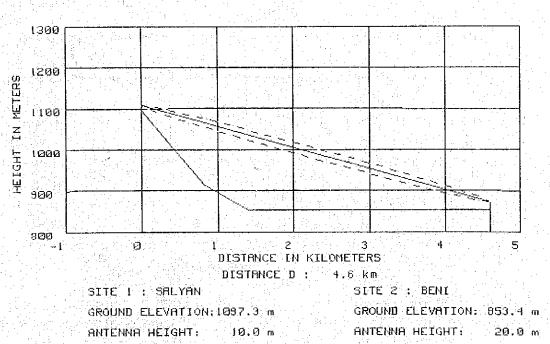
SITE 1 : BAGLUNG GROUND ELEVATION: 944.9 m ANTENNA HEIGHT: 15.0 m ANTENNA HEIGHT: 15.0 m

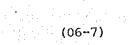
SAL BEN

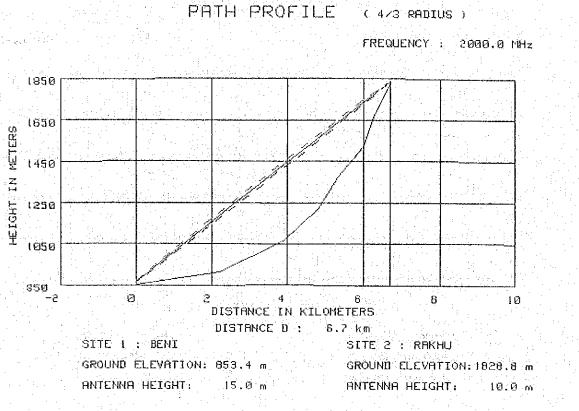
(06-6)

### PATH PROFILE ( 4/3 RADIUS )

FREQUENCY : 2000.0 MHz



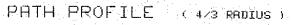




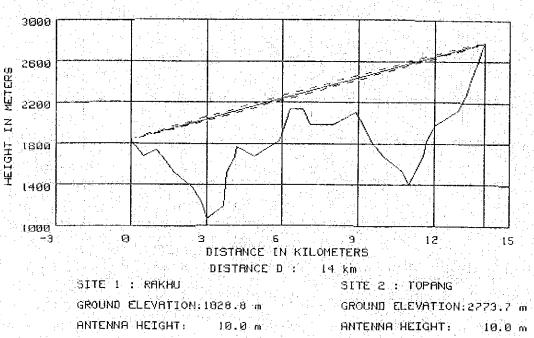
RAKTOP

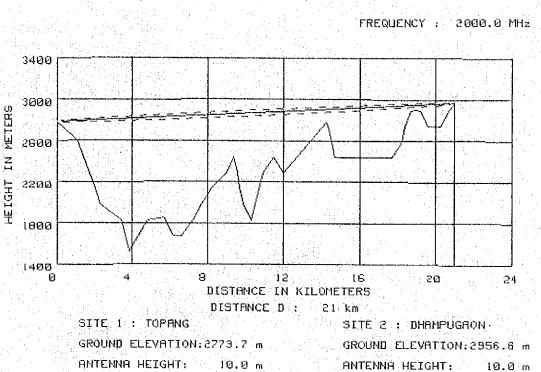
- ?

(06-8)









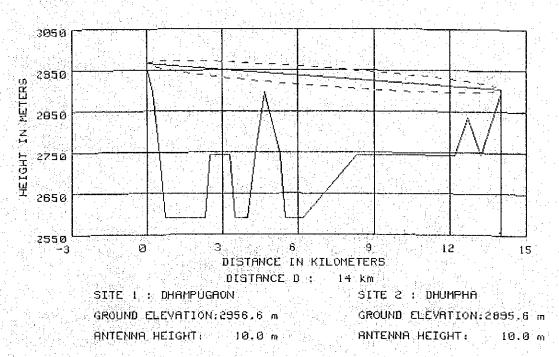
PATH PROFILE ( 4/3 RADIUS )

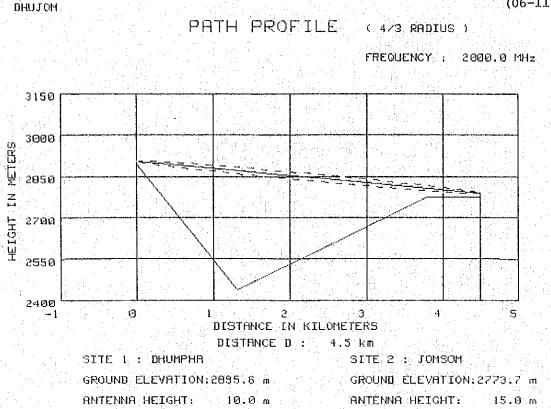
онарно

(06-10)

#### PATH PROFILE (4/3 RADIUS)

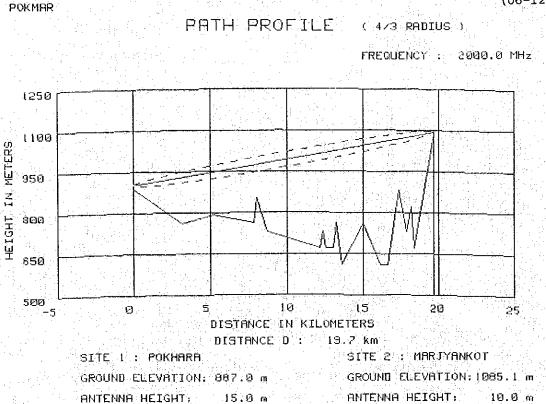
FREQUENCY : 2000.0 MHz

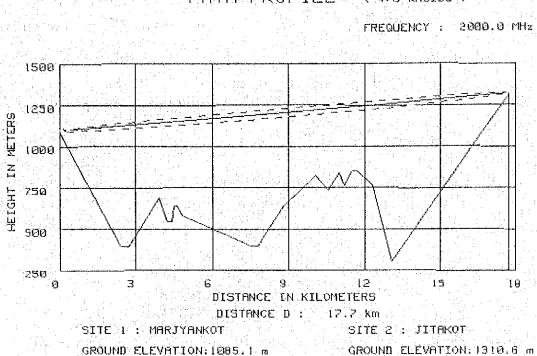












10.0 m

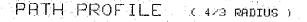
PATH PROFILE (4/3 RADIUS)

IITSAN

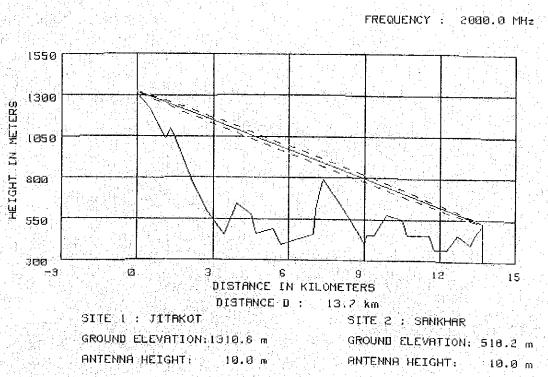
ANTENNA HEIGHT:

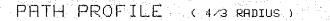
(06-14)

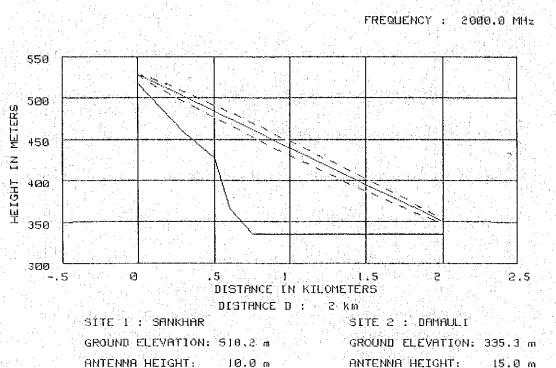
10.0 m



ANTENNA HEIGHT:

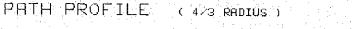




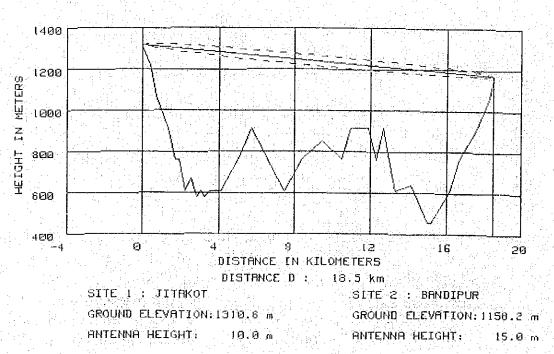


(06-16)

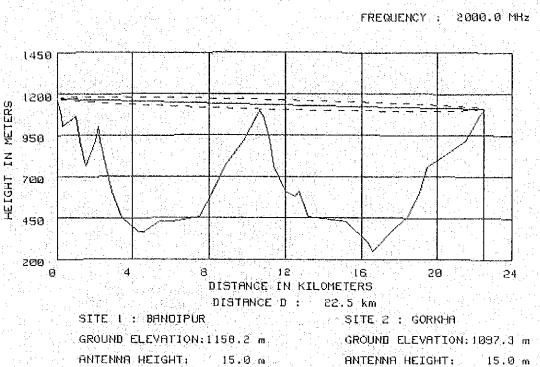
TITBAN



FREQUENCY : 2000.0 MHz



A47 -



PATH PROFILE ( 4/3 RADIUS )

(06-18)

JITGHR

3150

2600

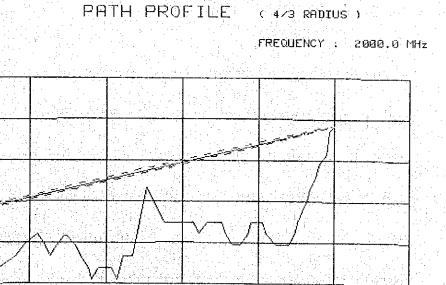
2050

1500

950

METERS

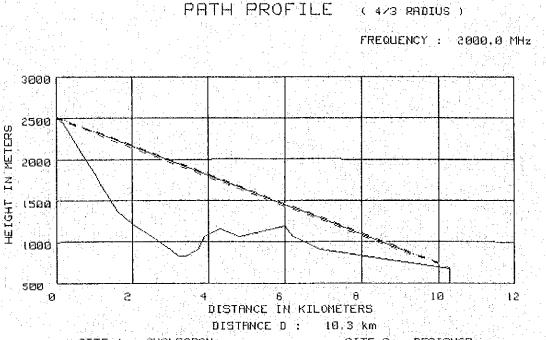
HEIGHT IN



4 1912 15 Ø 5 10 20 25 30 DISTANCE IN KILOMETERS DISTRNCE D : 25 km SITE 1 : JITRKOT SITE 2 : GHALEGRON GROUND ELEVATION: 1310.6 m GROUND ELEVATION: 2499.4 m ANTENNA HEIGHT: 10.0 m ANTENNA HEIGHT: 10.0 m

- A48 -

#### (06-19)



GHABES

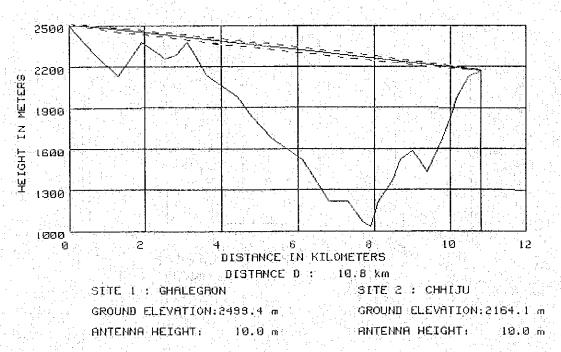
**GHACHH** 

SITE 1 : GHALEGAON SITE 2 : BESISHAR GROUND ELEVATION: 2499.4 m GROUND ELEVATION: 670.6 m ANTENNA HEIGHT: 10.0 m ANTENNA HEIGHT: 15.0 m

(06-20)

PATH PROFILE ( 4/3 RADIUS )

FREQUENCY : 2000.0 MHz



3000

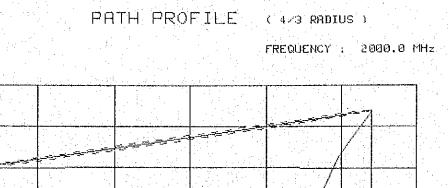
2600

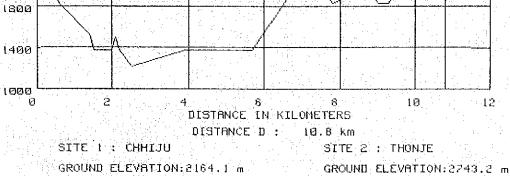
2200

METERS

NI

HEIGHT

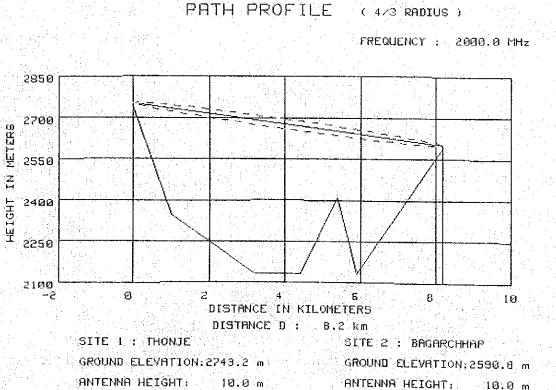




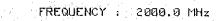


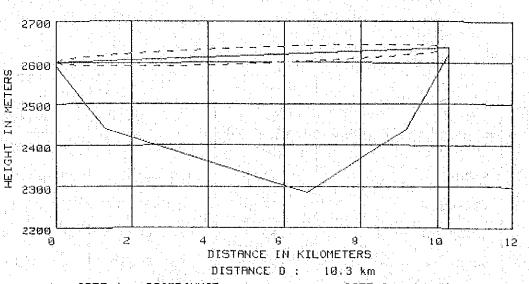


(06-22)









A51 -

SITE 1 : BRGARCHHAP GROUND ELEVATION:2590.0 m GROUND ELEVATION:2621.3 m ANTENNA HEIGHT: 10.0 m ANTENNA HEIGHT: 15.0 m Elevation and Coordinates of Station Site (07 Area)

	يەربى ئەتتەر بىلەر يەربىيە ئەتتەر بىلەر ئەتتەر مەربە ئەتتەر بەتقەر يەربىيە بىلەر مەربە ئەتتەر بىلەر ئەتتەر بىلەر بىلەر			
			Coordinates	
No.	Site Name	Elevation (m)	Longitude	Latitude
1	BHAIRAHNA	107	83"2717"E	27"30'27"N
5	PARASI	11.1 1.1.1	83°39′51"E	27°31/55"N
з	TRIBENI	122	83°55149"E	27° 27′ 12" N
- 4	JAITLUNG	1600	83°30′23"E	27°47′10"N
5	GULMI RS	1920	83°15′33"E	28°03′36"N
6	GULMI TANGHAS	1585	83°15′08"E	28°03′59″N
- 7	SHANDHIKHARKHA	1341	83°06′12″E	27°57′03"N

- A52 -

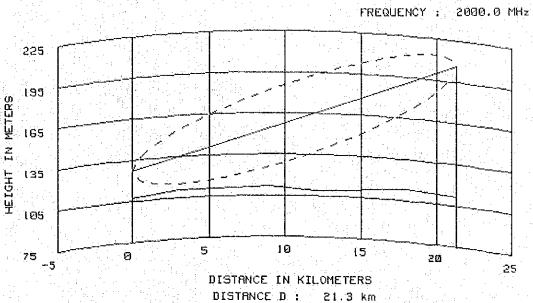
## Path Profile Maps (07 Area)

1. 1		
1	Bhairahwa -	Parasi
2	Parasi -	Tribeni
3	Bhairahwa -	Jaitlung (Covered by another project)
4	Jaitlung -	Gulmi R.S.
5	Gulmi R.S	Gulmi Tamghas
6	Gulmi R.S	Shandhikharkha

--;

( 4/3 RADIUS )

BHAPAR



PATH PROFILE

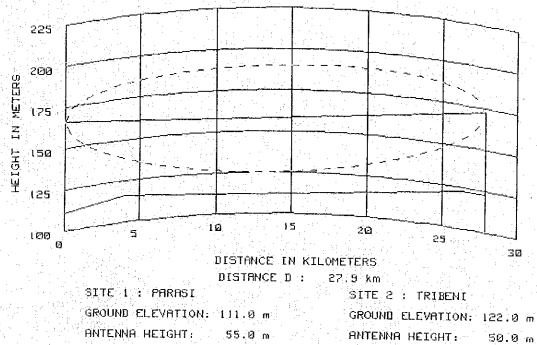
SITE 1 : BHAIRAHWA	SITE 2 : PARASI
GROUND ELEVATION: 107.0 m	GROUND ELEVATION: 111.0 m
ANTENNA HEIGHT: 20.0 m	ANTENNA HEIGHT: 95.0 m

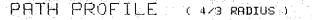
PARTRI

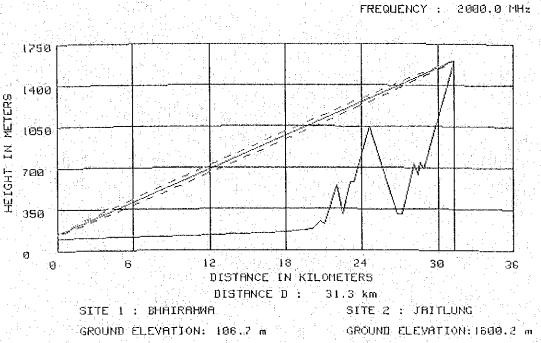
(07-2)



FREQUENCY : 2000.0 MHz







30.0 m



ANTENNA HEIGHT:

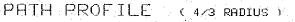
**IRIGUL** 

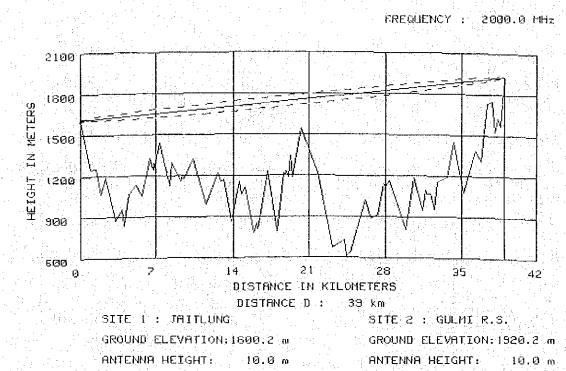
ANTENNA HEIGHT:

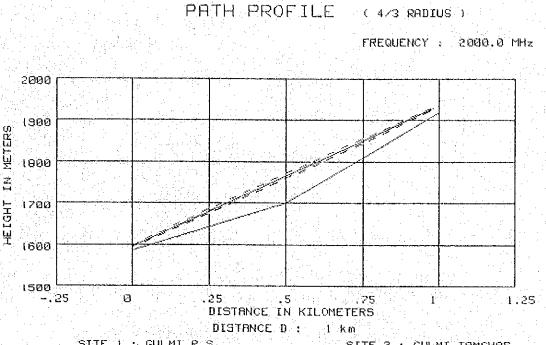
(Covered by another project)

(07-4)

10.0 m





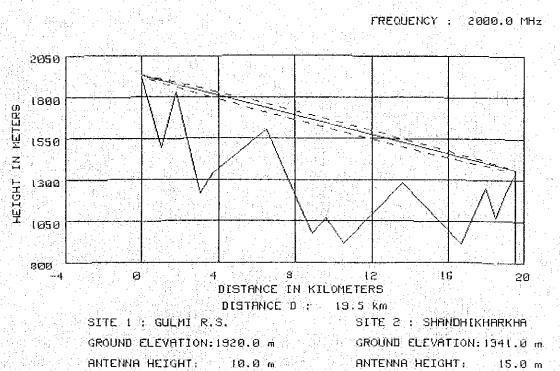


SITE 1 : GULMI R.S. SITE 2 : GULMI TAMGHAS GROUND ELEVATION:1505.0 m GROUND ELEVATION:1920.0 m ANTENNA HEIGHT: 10.0 m ANTENNA HEIGHT: 15.0 m

TAMSAN

(07-6)

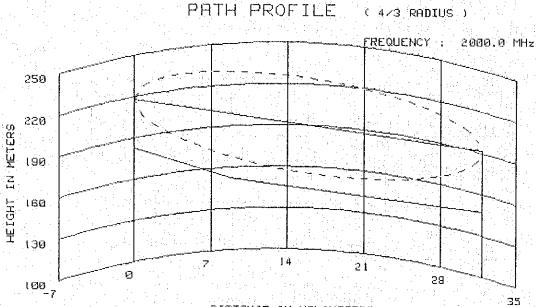
PATH PROFILE ( 4/3 RADIUS )



No.	Sitë Name	Elevation	Coordi	nates
	Of Ve frame	(m)	Longitude	Latitude
1	NEPALGUNJ	183	81°37′03"E	28ª 03 / 08 "N
2	GULARIA	146	81"20139"E	28°12′10"N
3	RAJAPUR	152	81°05′21″E	28°25′52"N
4	CHAMERE	1297	81°43′29″E	28°23′22"N
5	RAMINATTA	2134	81°37'09"E	28° 41′23"N
6	DRILEKH	1402	81"42'40"E	28" 50117"N
7	MRBU PEAK	3536	81°45`29"E	29°00/52"N
8	LUPRU	2377	81°46′50°E	29° 07441"N
9	KALIKOT	1524	81°41′22°E	29°06′00"N
10	GHONHORE	3261	81°57′05"E	29°11′11″N
11	MALABHIR	2774	82°10′15"E	29°16 46"N
12	JUMLA	2347	82"11'05"E	29" 16728"N
13	<b>RAJHAKOT</b>	1156	82°11'01"E	28° 02' 03"N
14	TULSIPUR	671	82° 17456°E	28"08'02"N
15	GHORAHI	677	82°29′18°E	28°02′44"N
16	CHAUPATTA	823	82 <b>°</b> 30′20"E	27°56/35"N
17	GADHAWA	250	82°31′59"E	27° 48′ 53″N
18	R.S.(2400 FEET)	732	82°30′43"E	27* 43*28"N
19	KOILABAS	229	82°31′54"E	27°41′32"N
20	BALLE	1951	82°17′45"E	28°14 47"N
21	SALYAN	1494	82°09<40"E	28ª22(28"N
22	KUMAR	2530	82 <b>*</b> 12 09"E-	28° 29′ 14"N
23	КНАСО	1871	82°15'40"E	28° 40′ 39" N
24	JAJARKOT	1158	82°12/30"E	28°41′56"N
25	MUSIKOT	1402	82°27′16"E	28° 42′41 "N
26	SAMRI	1951	82°30′24"E	28°13′15"N
27	PYUTHAN	1280	82°53′06"E	28"05'31"N
28	DHARBAN	2012	82°39′46"E	28° 16′ 28″ N
29	LIBANGGAON	1311	82"38'27"E	28" 18' 18" N

# Path Profile Maps (08 Area)

1	Nepalgunj -	Gularia	
2	Gularia -	Rajapur	
3	Nepalgunj -	Chamere	
4	Ramimatta -	Chamere	
5	Dailekh -	Ramimatta	
6	Dailekh -	Mabu Peak	
7	Mabu Peak -	Lupru	
8	- Lupru	Kailikot	
9	Lupru -	Ghonhore	
10	Ghonhore -	Malabhir	
11	Malabhir -	Jumla	
12	Nepalgunj -	Rajhakot	
13	Rajhakot -	Tulsipur	
14	Tulsipur -	Ghorahi	
15	Ghorahi -	Chaupatta	
16	Chaupatta -	Gadhawa	
17	Gadhawa -	R.S. (2400F)	
18	R.S. (2400F) -	Koilabas	
19	Tulsipur -	Balle	
20	Balle -	Salyan	
21	Salyan -	Kumar	
22	Kumar -	Khago	
23	Khago –	Jajarkot	
24	Khago -	Musikot	
25	Balle -	Samri	
26	Samri -	Pyuthan	
27	Samri -	Dharban	
28	Dharban -	Libanggaon	
1			



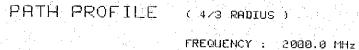
### DISTANCE IN KILOMETERS

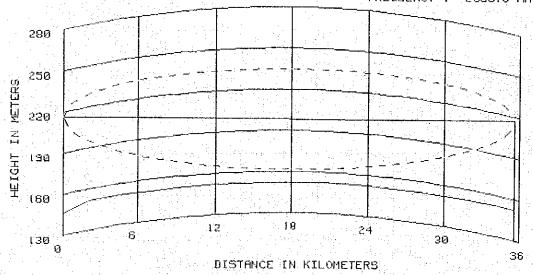
SITE 1 : NEPALGUNJ	JINNE U ;	SITE 2 :	GULARIA	
GROUND ELEVATION: 16	m 6.5	GROUND EL	EVATION.	146.J m
ANTENNA HEIGHT	15.0 m	ANTENNA H	EIGHT:	45.0 m

#### GULRAJ

NEPGUL

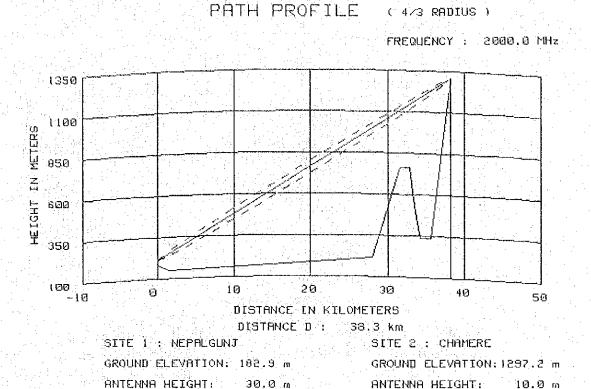
(08-2)





DISTRNCE D : 35.6 km SITE 1 : GULARIA GROUND ELEVATION: 146.3 m GROUND ELEVATION: 152.0 m

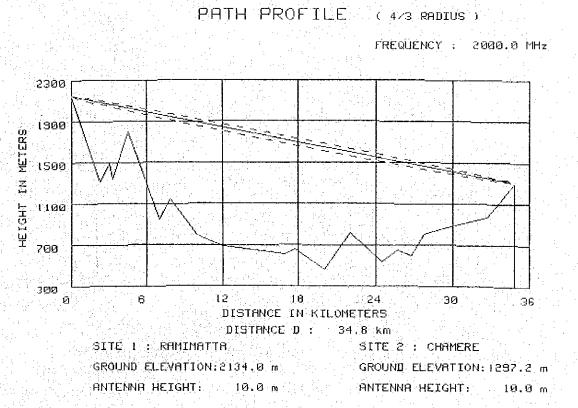
RNTENNA HEIGHT: 70.0 m ANTENNA HEIGHT: 65.0 m





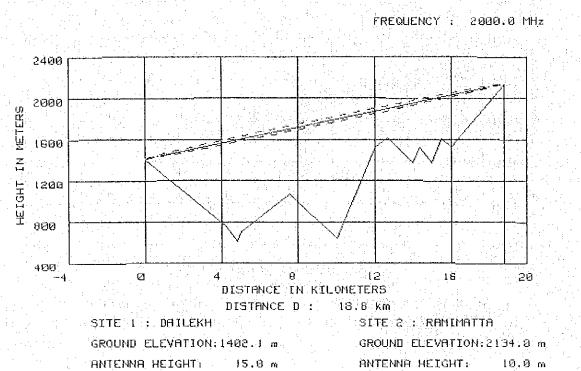
NEPCHA

(08-4)



DAIRAM

(08-5)



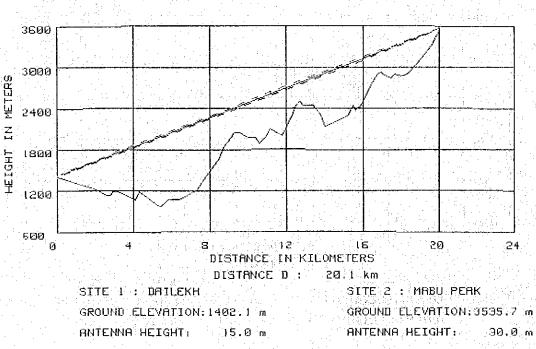
PATH PROFILE C4/3 RADIUS 1

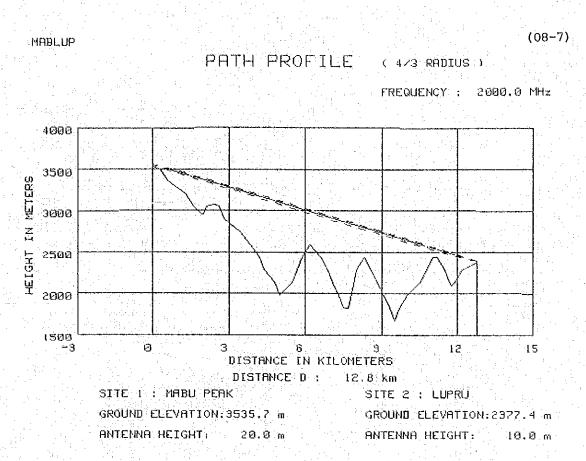
DALMAD

(08-6)







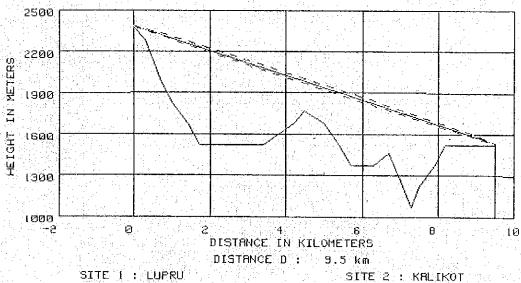


LUPKAL

(08-8)

PATH PROFILE ( 4/3 RADIUS )





GROUND ELEVATION:2377.4 m GROUND ELEVATION:1524.0 m RNTENNA HEIGHT: 10.0 m ANTENNA HEIGHT: 15.0 m