4.9.1 - LOCATION:
Latitude 12°- 22½ Longitude 14°- 12°. Situated on Bridge site on river Ebeji at Border of Migeria and Cameroon Republic at mile 89/90 cm

Gauge record available from August, 1962 onwards. Station was first established by PND during 1954. This was later taken over by Ministry of Agriculture, Irrigation Division during 1957.

SEDUY.

The first gauge was attached to pier of a timber Bridge at this site; during the construction period of the present Rainforced concrete Bridge the eld gauge was temporarily shifted to a distance of 2,000 feet U/S and a 2 inch dia G.I. pipe was used as gauge. The present Bridge was completed during 1960 when the present gauge was painted on the U/S left nose of pier number four from Maiduguri side of the bridge. Up to 50/6/55 the zero R.L. was 98.92 (Wulgo Datum). From December, 1965 to 31/12/66 it was 99.13 (marte - wulgo Survey and Fundamental B.M. "D" at mile 86 Maiduguri Gamboru Road value of which is 116.28). From 31/12/66 zero R.L. of gauge has been assumed as 9.00 for facility and simplicity of reference and two local Bench Marks have been established at site. The gauge position at site however continues unaltered.

Two local Bench Marks were established during December, 1966. B.M. No. 1 is painted on wheel guide of bridge about 14 feet from left abutment downstream side R.L. = 25.09, B.M. No. 2 is painted on wheel guide of bridge about 14 feet from left abutment U/S side R.L. = 25.12.

GATOHMENT AREA: 6,261 square miles.

of water way to influence the gauge discharge relationship. acres. There are however some fish traps which fishermen have fixed just on the upstream of this bridge, but they cause no Afflux or blockage Situated at about half a mile upstream of the Gamboru Ibrrigation pump house. About 40 to 50 cfs of water are drawn out to irrigate area 1400-

CHANNEL

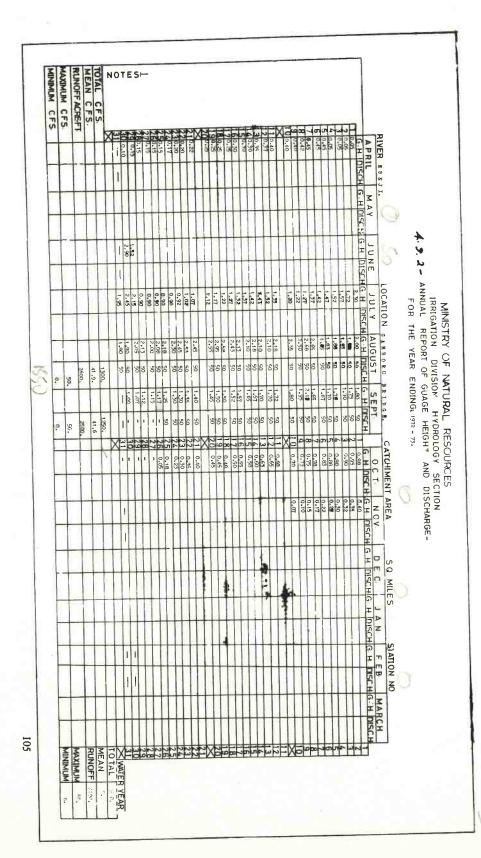
Left bank is relatively speaking a bit higher than right bank on the upstream side, but it is all the same on the downstream side, During higher stages river spill occurs on the right bank and sluggish sheet flow occurs up to a width of about half a mile on the right bank. But these conditions do not alter gauge discharge relationship on bridge site as there is no by passing of water. There is no afflux (also) because of bridge gullet and inflow and outflow remain constant. One fact however is to be kept in mind, the velocity of approach has oblique entry into the bridge. It is therefore to apply a correction factor in discharge computations.

DISCHARGE MEASUREMENT:

0.2 and 0.8 method is in use, Measurements are made from Bridge with the help of water current Metter. Wading measurements are made in low flows.

POINT OF ZERO FLOW:

Flow ceases at gauge 0.87.



POCUMENTATION PRODUCTE

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MINISTRY OF NATURAL RESOURCES NORTH EAST STATE OF NIGERIA.

HYDROLOGICAL YEAR BOOK

IRRIGATION DIVISION (HYDROLOGY SECTION)
M A I D U G U R I

3.2: ABBREVIATIONS:

3.2.1: MEASUREMENT UNITS:

			Minimum	11	Min				
			Maximum	11	Max				
			Mean Sea level	ij	M.S.L.				
			Reduced lovel	ti	R.L.				
			Water level	11	W.L.				
			3.2.2: GENERAL.	3.2.2					
Cubic metres	11	$M^3/\text{sec} =$	(A) DICONTINUAL	e) 191	r second	Cubic feet per second	H	CFS	닯
Kilometres per Hou	Н	Km/H	жилясь	י אוני	H	Miles per Hour	U	мРН	
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			d) VELOCITY.	d) VE					
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millilitres = c.c.	II	ml 7							
Litre = 1000 c.c.	II	Ţ				Acre-feet	H	Aft	
Cubic centimetres	11	ce				Cubic Feet	11	Cft	
			LIME.	c) VOLUME.					
Square metres	II	18 I				Scuare miles	tl	Sa Ml	
Square centimetres	H	CH				Acre	II	ac	
Square millimetres	11	2				Square inches	11	Sq in	
		v	A.	b) AREA.					
Kilometres	Н	Km				Miles	H	X 1	
Metres	Ħ	Ħ				Yards	Ħ	Υď	
Centime tres	II	CB				Feet :	H	Ft	
Millimetres	34	mm				inches	H	ti d	
			CTH.	a) LENGTH.					
ľ	TINU	METRIC UNITS.				NITS.	s. un	F. P. S. UNITS.	
2									

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U/s
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G.I
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                                                                                                                              Discharge
                                                                                                                                        Velocity
                                                                                                                                                  Approximate, Approximatly
                                                                                                                                                            Average
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MINISTRY OF NATURAL RESOURCES NORTH EAST STATE OF NIGERIA.

HYDROLOGICAL YEAR BOOK

IRRIGATION DIVISION
(HYDROLOGY SECTION)
M A I D U G U R I

LOCATION: Latitude 12°- 22½' Longitude 14°- 12'. mile 89/90 on Maiduguri-Fort Lamy Road. Situated on Bridge site on river Ebeji at Border of Nigeria and Cameroan Republic at

ESTABLISHED: Station was first established by PWD during 1954. This was later taken over by Ministry of Agriculture, Irrigation Division during 1957. Gauge racord available from August, 1962 onwards.

The first gauge was attached to pier of a timber Bridge at this site; during the construction period of the present Rainforced concrete Bridge the old gauge was temporarily shifted to a distance of 2,000 feet U/S and a 2 inch dia G.I. pipe was used as gauge. The present Bridge was completed during 1960 when the present gauge was painted on the U/S left nose of pier number four from Maiduguri and of the bridge. Up to 30/6/65 the zero R.L. was 98.92 (Wulgo Datum). From December, 1965 to 31/12/66 it was 99.13 (marte - wulgo Survey and Fundamental B.M. "D" at mile 66 Maiduguri Gamboru Road value of which is 116.28). From 31/12/66 gauge has been assumed as 0.00 for facility and simplicity of reference and two local Bench Marks have been established at site. The gauge position at site however continues unaltered.

BENCH MARK:

Two local Bench Marks were established during December, 1966. B.M. No.1 is painted on wheel guide of bridge about 14 feet from left abutment U/S left abutment downstream side R.L. = 23.09. B.M. No. 2 is painted on wheel guide of bridge about 14 feet from left abutment U/S side R.L. = 23.12.

CATCHMENT AREA: 6,261 square miles.

REGULATION OR DIVERSION:
SItuated at about half a mile upstream of the Gamboru Irrigation pump house. About 40 to 50 cf3 of water are drawn out to irrigate area 1400 acres. There are however some fish traps which fishermen have fixed just on the upstream of this bridge, but they cause no Afflux or blockage of water way to influence the gauge discharge relationship.

CHANNEL: Left bank is relatively speaking a bit higher than right bank on the upstream side, but it is all the same on the downstream side, but in it is all the same on the downstream side, but in it is all the same on the downstream side, but in it is all the same of about half a mile on the right bank. But these conditions do not after gauge discharge relationship on bridge site as there is no by passing of water. There is no afflux (also) because of bridge guliet and inflow and outflow remain constant. One fact however is to be kept in mind. There is no afflux (also) because of bridge guliet and inflow and outflow remain constant. One factor in discharge computations.

DISCHARGE MEABUREDQNT:7.7 and 0.8 method is in use. Measurements are made from Bridge with the help of water current Metter.

8.7 and 0.8 method is in use. Measurements are made from Bridge with the help of water current Metter.

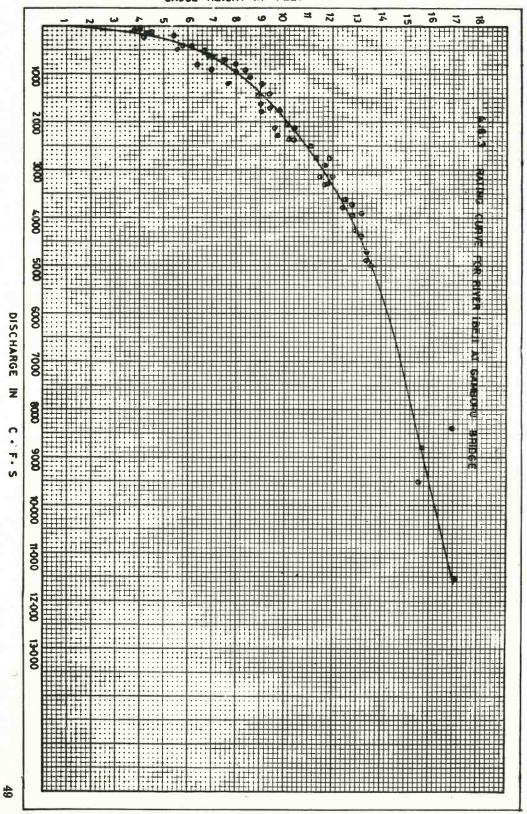
8.2 and 0.8 method is in use. Measurements are made from Bridge with the help of water current Metter. Wading measurements are

POINT OF ZERO flew: Flow ceases at Cause 0.87.

MINISTRY OF WATER RESOURCES & IRRIGATION
IRRIGATION DIVISION HYDROLOGY SECTION
4.6.2 ANNUAL REPORT OF GUAGE HEIGHT AND DISCHARGEFOR THE YEAR ENDING. 1975-1974.

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MINISTRY OF WATER RESOURCES AND IRRIGATION NORTH EASTERN STATE OF NIGERIA

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