VOLUME I - SYSTEM DESCRIPTION AND OPERATING INSTRUCTIONS

## UNCLASSIFIED

TECHNICAL MANUAL FOR

TRANSMITTING SET, RADIO

MODEL GPT-200K

(AN/FRT-)



THE TECHNICAL MATERIEL CORPORATION
OTTAWA, ONTARIO

## TABLE OF CONTENTS

For

## VOLUME I, PART I: SYSTEM DESCRIPTION OF

## THE SYNTHESIZED GPT-200K TRANSMITTER

Paragraph	Subject	Page
I-1-1	General	1
I-1-2	Advantages of Single Sideband Carrier Suppressed versus Conventional AM Operation; Rating Suppressed Carrier Transmitters	4
II-1-3	Functional Description of GPT-200K's Main Assemblies	6
	a. First Frame Equipment Units, Synthesized GPT-200K Transmitters	6
	(1) Sideband Exciter, CBE (2) Controlled Master Oscillator, CMO-1, -2 (3) Frequency Amplifier (CHG-1, -2)	6 7
	and Power Supply (CPP-1)  (4) Control Oscillator, CLL-1  (5) Primary Standard, CSS-1A  (6) Tone Intelligence Unit, TIS-3  (7) Power Supply, CPP-2  (8) Frame and Accessories	7 8 8 9 9
	b. Second Frame Equipment Units	10
	(1) Radio Frequency Amplifier (RFC-1) and its Power Supply (AX-104) (2) First PA Compartment of GPT-200K (3) Relay and Indicator Control Panels, GPT-200K (4) Main Power, Supply and High Voltage Rectifier Sections of GPT-200K (5) Frame and Accessories	10 10 10
	c. Third Frame Equipment Units	12
	(1) Second PA Compartment of GPT-200K (2) Blower and Filament Compartment of GPT-200K (3) Bias Supply Drawer, Main Control	12
	Panel, Indicator and Relay Panel Compartments of GPT-200K  (4) Frame and Accessories	13