

CONTENTS

REPORT : AUSTRALIAN AID,
GEODETTIC CONTROL SURVEY
WESTERN SAMOA

DEPARTMENT OF LANDS AND SURVEY

SECTION

1.1 SUMMARY

GENERAL

- 1.2 INTRODUCTION AND BACKGROUND
- 1.3 PROGRAM FUNDING
- 1.4 STATEMENT OF DUTIES FOR RECRUITED POSITION
- 1.5 GEODETTIC CONTROL SURVEY
- 1.6 GEODETTIC CONTROL NETWORK USES
- 2.0 FIELD SURVEY STAFF INVOLVED IN PROJECT
- 2.1 LOGISTICS SURVEY FIELD WORK
- 2.2 INLAND MOUNTAIN SURVEY CONTROL
- 2.3 HELICOPTER SUPPORT
- 2.4 INLAND MOUNTAIN SURVEY CONTROL, SAVAI'I
- 3.0 EQUIPMENT UTILISED
- 3.1 TOYOTA HILUX
- 3.2 DI20 DISTOMAT
- 3.3 WILD T2
- 3.4 HANDIC TRANSCIEVERS
- 3.5 ALUMINIUM DINGHY AND OUTBOARD MOTOR
- 4.0 APPLE IIE MICROCOMPUTER

5.0

TECHNICAL REPORT

- 5.1 SUMMARY : GEODETIC CONTROL SURVEY AND MAPPING
- 5.2 DETAILS FIELD SURVEY DATA SUPPLIED
- 5.3 COMPUTATION DATA SUPPLIED
- 6.0 GEODETIC CONTROL SURVEY NETWORK
- 6.1 FIELD SURVEY OBSERVATION PARAMETERS
- 6.2 INITIAL AZIMUTH DATUM
- 6.3 GEODETIC DATUM
- 6.4 POSITION DATUM
- 6.5 GEODETIC AZIMUTH AND LAPLACES EQUATION
- 7.0 GEODETIC COMPUTATIONS AND MAP PROJECTION
- 7.1 UTM. MAP PROJECTION PARAMETERS
- 7.2 TM. MAP PROJECTION PARAMETERS
- 7.3 SEQUENCE GEODETIC COMPUTATIONS - HORIZONTAL
- 7.4 ACCURACY GEODETIC CONTROL TRAVERSING
- 7.5 GEODETIC CONTROL SURVEY
COMPARISONS WITH DOPPLER STATIONS
- 7.6 ANALYSIS DOPPLER DATA AGAINST CONTROL SURVEY DATA
- 8.0 GEODETIC COMPUTATIONS VERTICAL
- 8.1 ACCURACY HEIGHTS BY TRIGNOMETRICAL LEVELLING
- 8.2 SUMMARY VERTICAL CONTROL
- 9.0 LEMUTA COORDINATE SYSTEM
- 9.1 CONVERSION LEMUTA COORDS. TO UTM. AND TM. COORDINATES.
- 10.0 ERRORS IN EXISTING MAPPING, WESTERN SAMOA
- 11.0 RECOMMENDATIONS GEODETIC CONTROL NETWORK
- 12.0 STAFF TRAINING
- 13.0 PHOTOGRAMMETRY
- 13.1 MAP PRODUCTION

14.0 E.E.Z. AND WESTERN SAMOA

15.0 APPENDIX :

- (A) GEOGRAPHICAL AND U.T.M GRID COORDINATE LISTING
SIX DEGREE ZONE WIDTH
- (B) GEOGRAPHICAL AND T.M. GRID COORDINATE LISTING
TWO DEGREE ZONE WIDTH
- (C) HEIGHT LISTING TRIGNOMETRICAL LEVELLING
- (D) SURVEY PLAN DETAILING OVERALL NETWORK
- (E) LIST OF STATION SUMMARIES.
