

**THE DESIGN AND TESTING OF PLANS
AT GOVERNMENT LEVEL
IN KUWAIT**

**M. ALWANI (SENIOR EXPERT IN PLANNING
MINISTRY OF INTERIOR, KUWAIT)**

**E.F. WOLSTENHOLME (SENIOR LECTURER,
MANAGEMENT SCIENCE,**

UNIVERSITY OF BRADFORD, MANAGEMENT CENTRE)

**A. A. AL-HUDAIB (ASSISTANT UNDERSECRETARY
MINISTRY OF INTERIOR, KUWAIT)**

BACKGROUND

This poster is concerned with the application of system dynamics as a decision support tool to assist the five-year development planning process in Kuwait.

The Kuwaiti Government, and in particular the Ministries of the Interior and Planning, have been progressively introducing more elaborate procedures for development planning. A five year plan currently exists and is being implemented. Work is now in progress on the extension of the plan into the 1990's and a system dynamics group is to be formed to consolidate and extend existing support of the planning process. The group will use micro computer software (DYSMAP2) and plans to train Kuwaiti technicians are underway.

This poster presents an example of how system dynamics is being used in Kuwait to analyse objectives and plans for feasibility and compatibility prior to implementation. The example concerns police labour force planning and preliminary results and conclusions are presented.

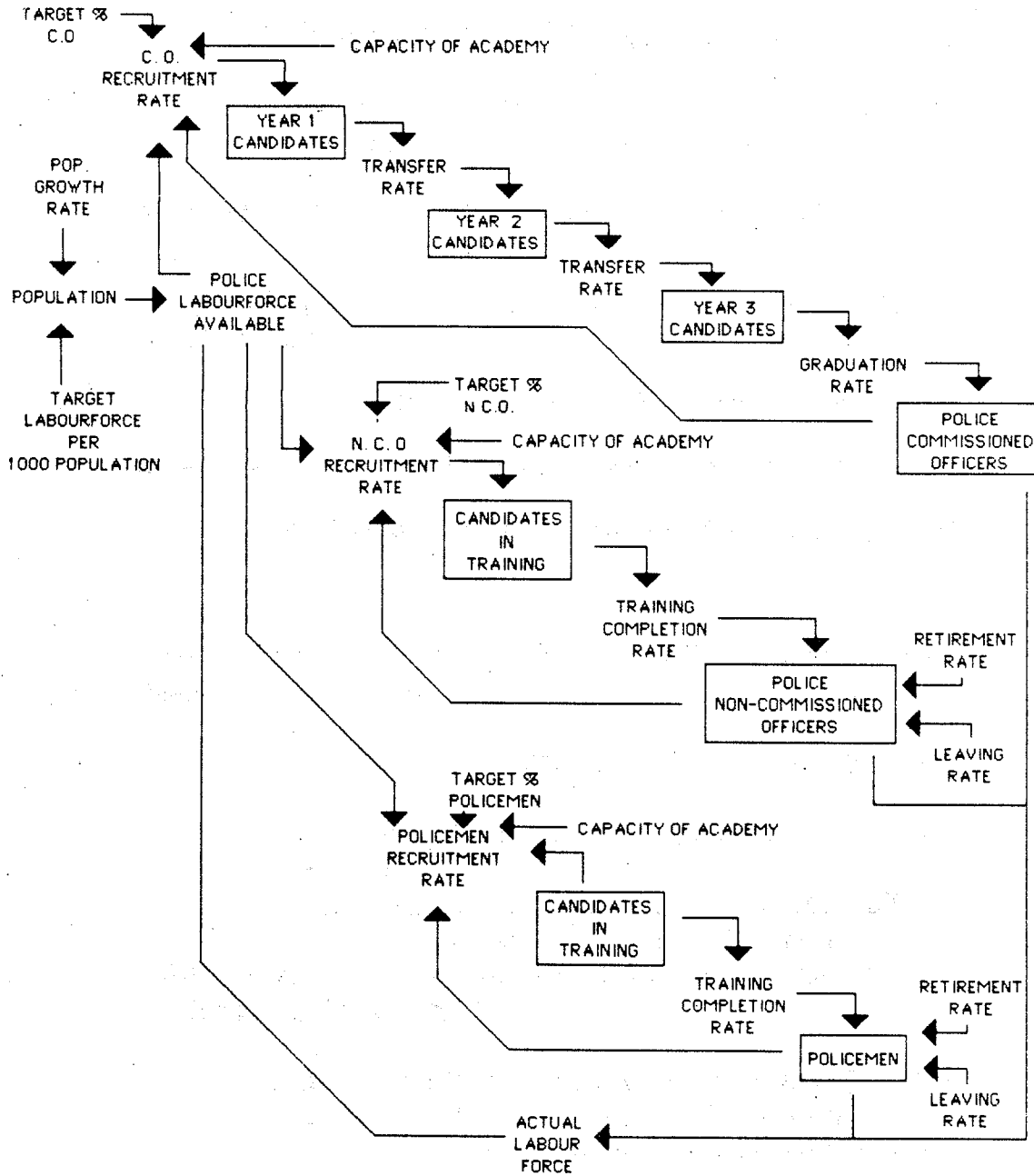
POLICE LABOUR FORCE PLANNING

PROBLEM:- To plan the Kuwaiti police labour force to achieve the following objectives.

- 1) Police Commissioned Officers to be 13% of the total police force**
- 2) Police Non-Commissioned Officers to be 43.5% of the total police force**
- 3) Policemen to be 43.5% of the total police force**
- 4) Total size of police force to be 7% of total Kuwait population**
- 5) Capacity of training facilities to be fully utilised.**

MODEL: PARAMETER VALUES (see diagram on next sheet)

- Current Kuwaiti Population = 1.63E6**
- Military Academy (Training of Commissioned Officers)**
 - Candidate Intake Rate 120/150 per year**
 - Three Year Training Programme**
 - Current Number of Commissioned Officers = 1196 (9% of Police Force)**
- Non-Commissioned Officers Training School**
 - Candidate Intake Rate = 350/500 per year**
 - One Year Training Programme**
 - Current Number of Non-Commissioned Officers = 7127 (56% of Police Force)**
- Policemen Training Unit**
 - Candidate Intake Rate = 350/500 per year**
 - One Year Training Programme**
 - Current Number of Policemen = 4350 (34% of Police Force)**



**INFLUENCE DIAGRAM OF LABOUR
FORCE PLANNING MODEL**

EXPERIMENTS WITH THE POLICE LABOUR FORCE PLANNING MODEL

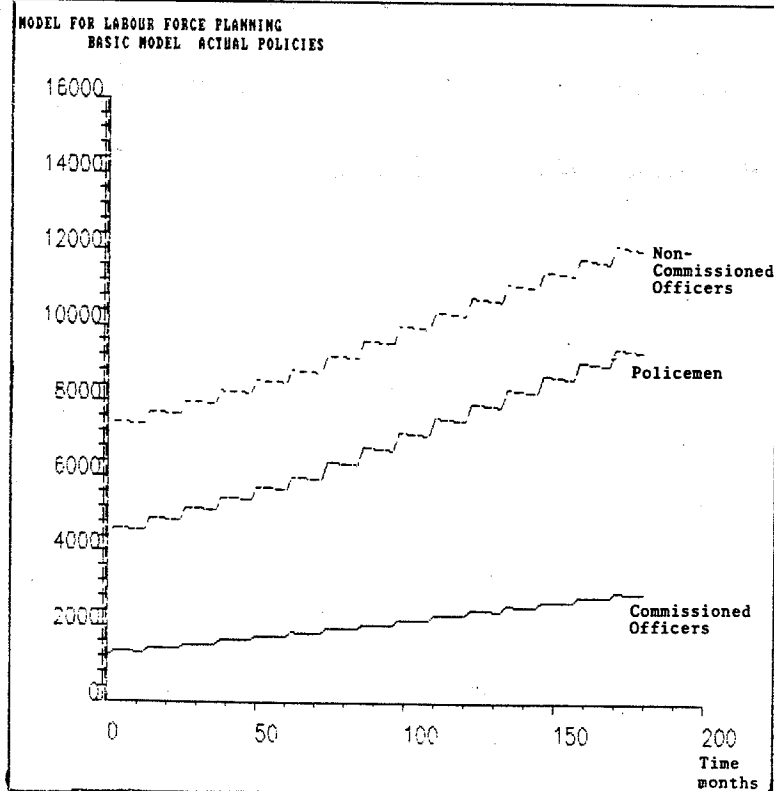
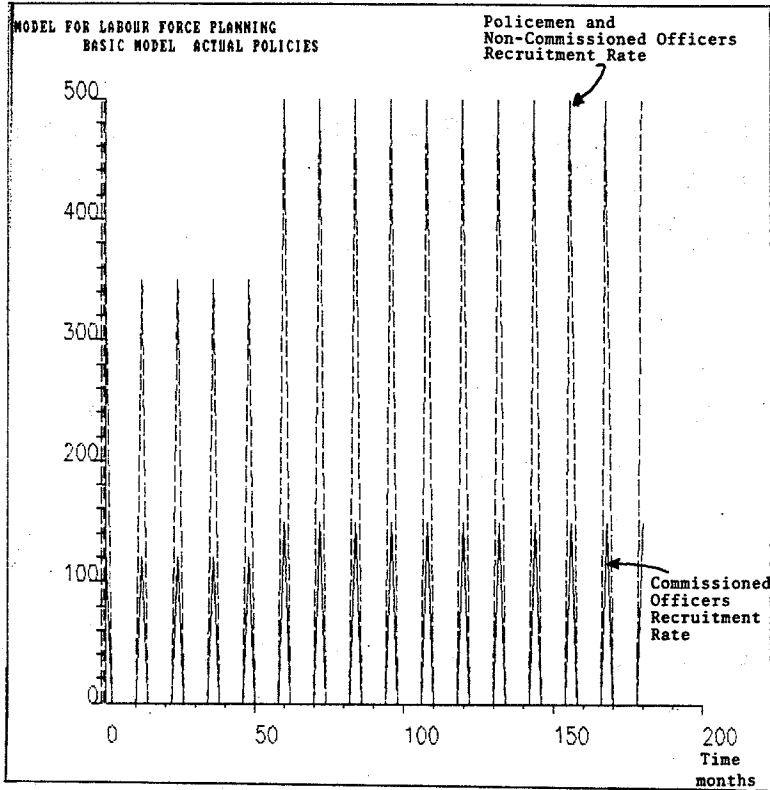
- 1) Recruit all categories of police to fill current capacities of training institutions (fulfil objective 5).**

- 2) Control recruitment of all categories of police to achieve objectives 1 - 4.**

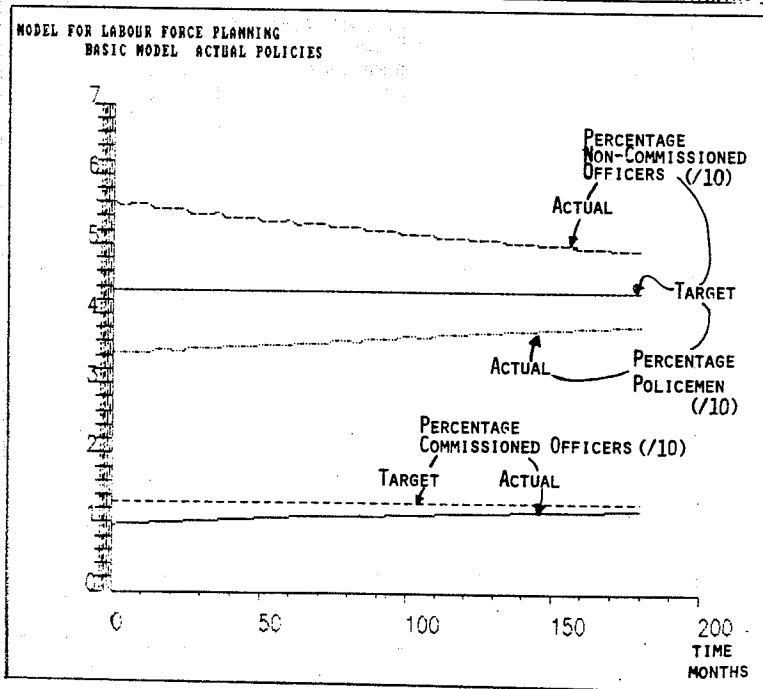
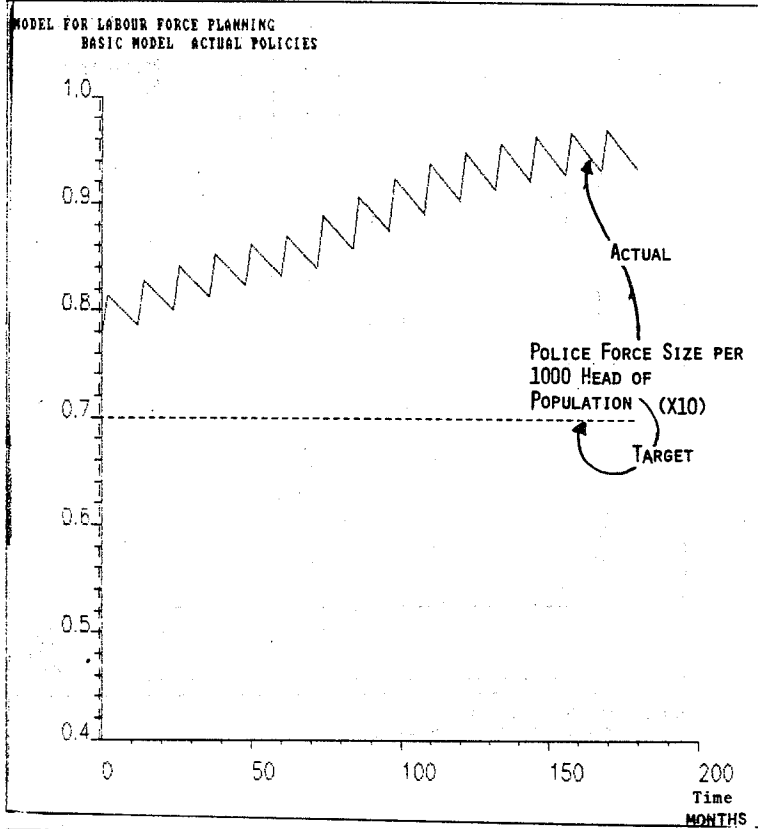
- 3) Control recruitment of police to achieve new objectives:**
 - police commissioned officers to be 20% of total force**
 - police non-commissioned officers to be 40% of total force**
 - policemen to be 40% of total force**

EXPERIMENT 1

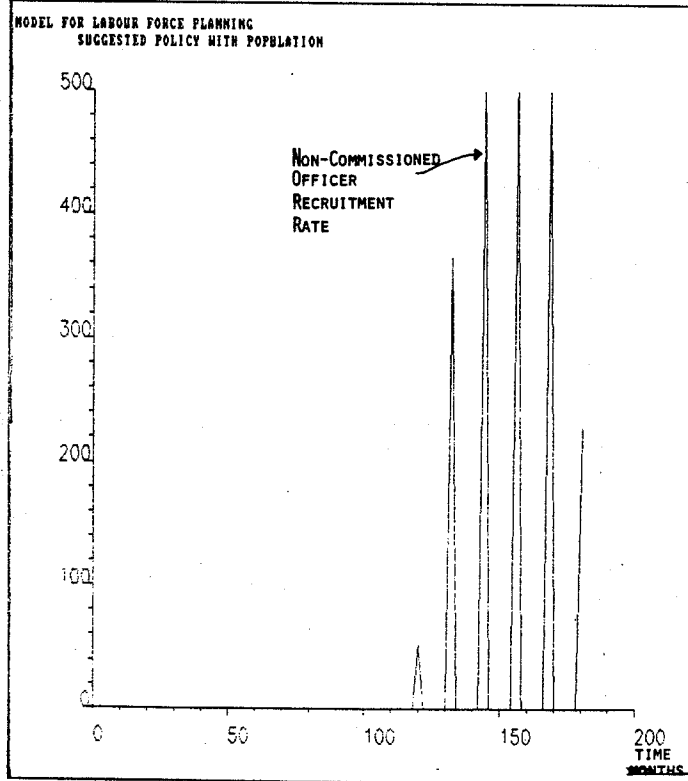
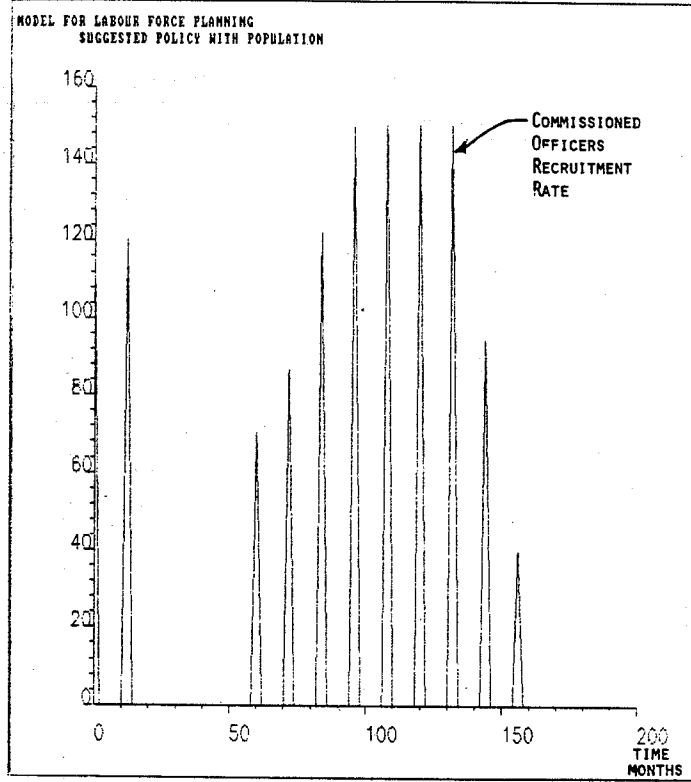
(RECRUIT POLICE TO FILL CAPACITIES OF TRAINING INSTITUTIONS)



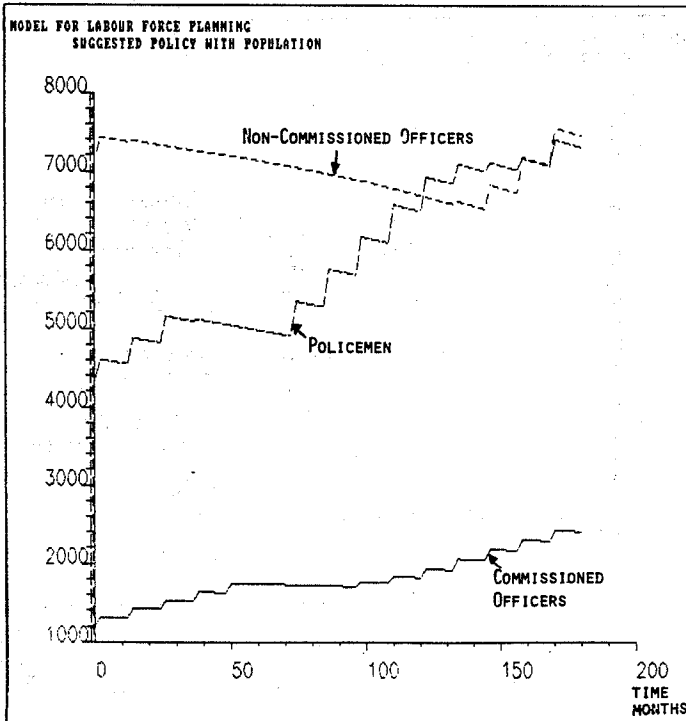
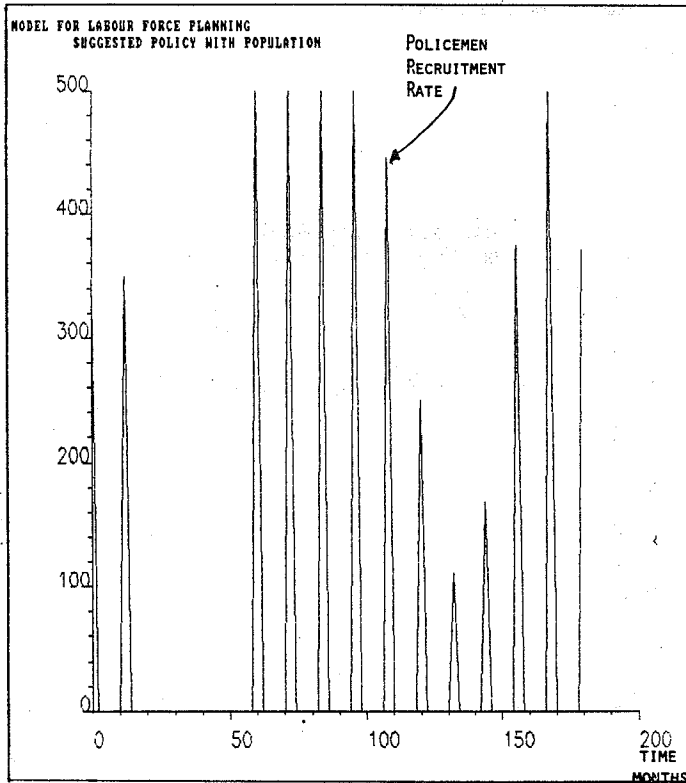
EXPERIMENT 1 CONTINUED
(RECRUIT POLICE TO FILL CAPACITIES OF TRAINING INSTITUTIONS)



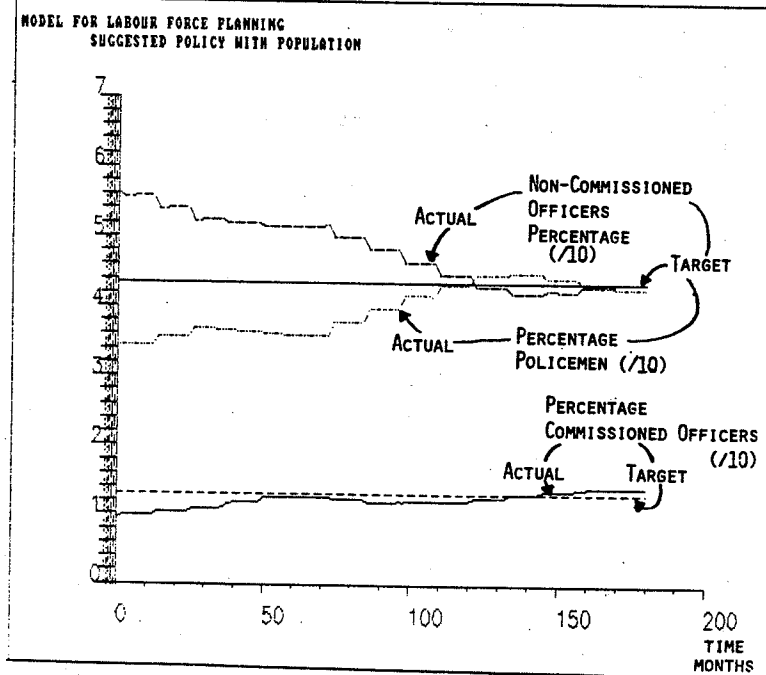
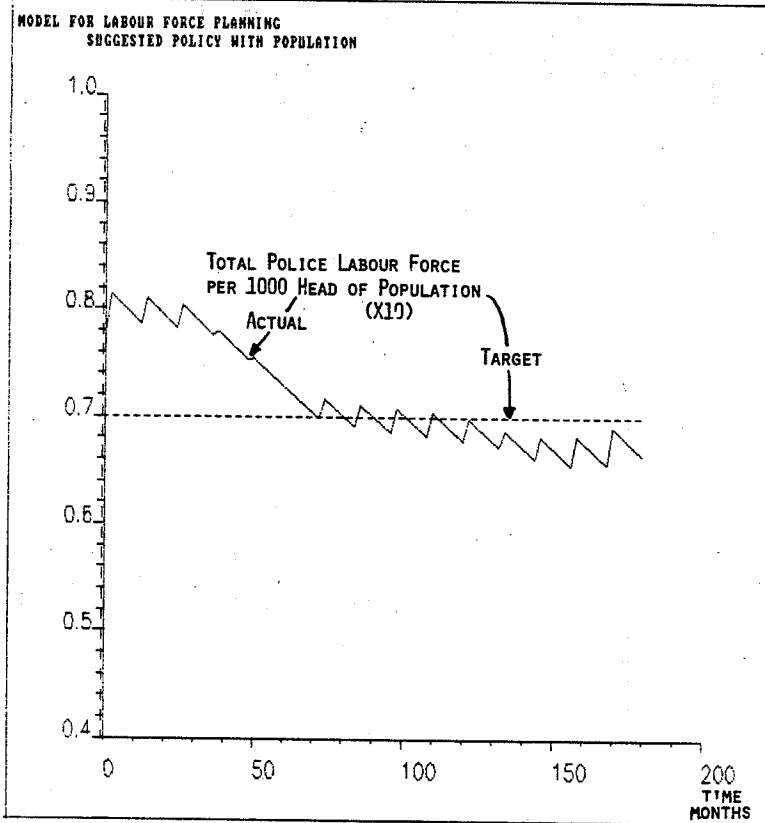
EXPERIMENT 2
CONTROL RECRUITMENT OF POLICE TO MEET TARGET PERCENTAGES



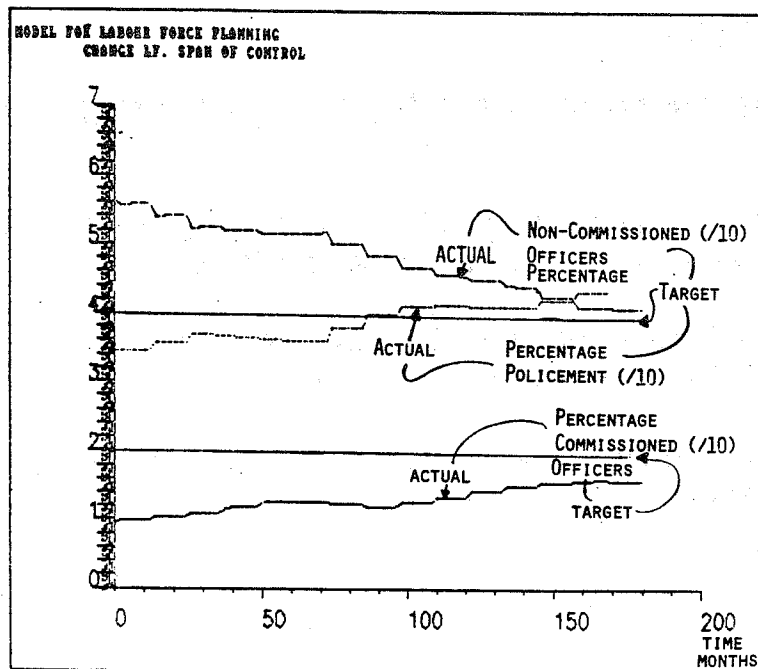
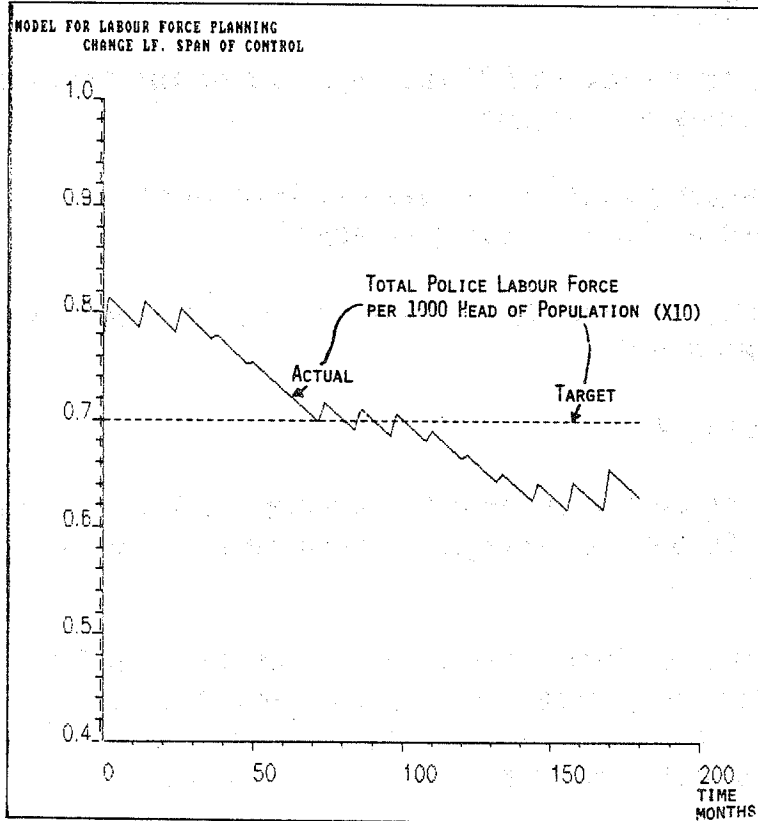
EXPERIMENT 2 CONTINUED
CONTROL RECRUITMENT OF POLICE TO MEET TARGET PERCENTAGES



EXPERIMENT 2 CONTINUED
CONTROL RECRUITMENT OF POLICE TO MEET TARGET PERCENTAGES



EXPERIMENT 3
CONTROL RECRUITMENT OF POLICE TO MEET REVISED PERCENTAGES



SPECIFIC CONCLUSIONS

Experiment 1

Recruiting police to fill the capacity of the Training Institutions will result in:

- **the target police force size per 1000 head of population being greatly exceeded**
- **the target percentages in each category of police not being met.**

Experiment 2

Recruiting police to meet the population based target and the target percentages in each category of police will result in:

- **the Training Institutes having to close down for substantial periods of time and even then, an excessive time before the targets are met given current retirement policies and leaving rates**

Experiment 3

Relaxing the target percentages in each category of police:

- **does not significantly affect the ability to control the number of non-commissioned officers**
- **makes it more difficult than before to meet the target for commissioned officers**
- **makes it easier than before to meet the target for policemen.**

SPECIFIC INSIGHTS

- 1) The current planning objectives for the recruitment and operation of the police force are incompatible.**
- 2) The problem stems from the currently excessive number of non-commissioned officers and an unacceptably long time is required to reduce the number of these officers by recruitment cutbacks alone.**
- 3) Consideration should be given to more radical measures to achieve the planned objectives:**
 - early retirement schemes**
 - inter category transfers and retraining**
- 4) The model served the intended purpose of highlighting planning weaknesses and acted as a catalyst to focus attention on the need for internal improvements in communication, negotiation and compromise in the planning process.**