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The Commercial Non-Developmental Items of Law Enforcement Equipment (CNDI-LEE) Final Report has been prepared to determine items of commercially available law enforcement equipment which are necessary to improve the operational effectiveness and safety of the military police. The report includes the following recommendations: (1) To transfer Army CNDI-LEE findings; (2) A proposal for fleet law enforcement vehicle rentals; (3) A prioritize listing of law enforcement equipment that should be standardized and programed for procurement; and (4) Additional follow-on-evaluations for specific law enforcement equipment.

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Data to support these recommendations was obtained by visitations to key DARCOM, TRADOC, and FORSCOM installations through interviews with various military personnel, to include provost marshals, military police, Inspector General, Supply and Procurement officers, and interviews with juxtapositioned civilian law enforcement agencies.

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FINAL REPORT
COMMERCIAL NON-DEVELOPMENTAL ITEMS
OF LAW ENFORCEMENT EQUIPMENT
VOLUME II
TASK/EQUIPMENT ANALYSIS

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SEP 12 1979

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1-032-00-358-00

By

Kathleen M. Nardini

Submitted to: U.S. Army Military Police School/
Training Center
Directorate of Combat Developments
Test and Evaluation Coordination Office
Ft. McLellan, Alabama 36205

In compliance with Contract No. DAAK 21-79-C-0021

Submitted by: Science Applications, Inc.
8400 West Park Drive
McLean, Virginia

19 August 1979

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FINAL REPORT

COMMERCIAL NON-DEVELOPMENTAL ITEMS

OF LAW ENFORCEMENT EQUIPMENT

VOLUME II

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ACKNOWLEDGEMENTS

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COMMERCIAL NON-DEVELOPMENTAL ITEMS
OF LAW ENFORCEMENT EQUIPMENT
VOLUME II
TASK/EQUIPMENT ANALYSIS

1.   INTRODUCTION

A task analysis of Military Police activities performed in the
garrison environment was conducted. The purpose of conducting this
analysis was:

- To identify primary Military Police functions and tasks
- To identify items of law enforcement equipment used to
  perform these tasks
- To determine the most suitable type of item to be used to
  perform required tasks
- To recommend the most appropriate items of law enforcement
  equipment to be standardized.

Data collection techniques included the conduct of structured interviews
with Military Police at several installations visited and the administration
of a rating scale evaluation form to Military Police at one of the re-
maining installations visited. Based on analysis of the data, conclusions
were drawn and recommendations were suggested.

Subjective and objective data were collected during visits to
various installations. A structured interview schedule was designed and
developed to ensure that subjective data would be collected in a controlled,
systematic and similar manner. The interview schedule was used as a guide
to interview Military Police at various installations. To validate sub-
jective data collected and to quantify the impact of using particular
items of equipment on safety, crime and Military Police effectiveness,
an evaluation rating scale form was designed and developed. This rating
scale was administered to a total of 29 "knowledgable users" of equipment
and mean ratings for 49 items of equipment along three dimensions of
interest were obtained.

Data was analyzed in terms of Military Police tasks and functional requirements associated with using an item of equipment to accomplish the task. The following four Military Police functional areas were identified; Station Operations, Patrol Operations, Military Police Operations, and Traffic Operations. Personnel working in these areas utilized most of the commercial items of law enforcement equipment under investigation. Within each of these areas, interview data was summarized in each of six tables and individual items were selected for detailed analysis. Individual item descriptions include tasks performed while using the item, operational characteristics of the item, mean ratings along three evaluation dimensions, user requirements, conclusions and recommendations for standardization.

2.   TASK ANALYSIS PROCEDURE

To perform the task analysis of Military Police tasks in conjunction with the use of items of law enforcement equipment, both subjective and objective data were collected in a systematic manner. To identify Military Police functions, missions and items of law enforcement equipment in use, structured interviews were conducted with Military Police at designated installations. To further evaluate selected items of law enforcement equipment, a rating scale evaluation form was administered to knowledgeable "users" of the equipment. Conclusions and recommendations for standardization of commercial items of law enforcement equipment were based on these findings.

In order to identify Military Police functions and items of law enforcement equipment in use, and to determine interrelationships between MP tasks and items of equipment, structured interviews were conducted with those Military Police who were most familiar with the equipment. Emphasis was placed on investigating commercial items of law enforcement equipment although military issue (standard) items were also considered in the analysis.

The objectives of conducting these interviews were:

- To identify Military Police tasks
- To identify commercial items of law enforcement equipment in use
- To identify military issue (standard) items of law enforcement equipment in use
- To identify alternative equipment items
- To identify operational characteristics of each item
- To determine user requirements.

To ensure that subjective data would be collected in a controlled, systematic, and similar manner across installations, a structural interview

schedule was designed and developed. The design of this schedule was based on data collected during initial interviews at the first installation visited. The schedule included objectives of performing the task analysis, procedures for conducting the interviews, suggested sources of information, equipment categories, checklists of items of equipment in each category, suggested interview questions, and data record forms. After the schedule was developed, it was used as a guide to interviewing "users" at the remaining installations. The structured interview schedule is attached in Appendix A.

To validate subjective data collected during the conduct of the structured interviews and to quantify the impact of using particular items of equipment on safety, crime and overall MP effectiveness, an evaluation rating form was designed and developed. Those items of equipment most frequently brought to the researchers attention during interview sessions were identified and selected for inclusion in the evaluation form. A total of 49 law enforcement items was selected, most of which were commercial items. A five point rating scale was developed for each of the following three dimensions; improve MP safety, reduce crime, and increase MP effectiveness. The rating scale evaluation form with related instructions for administration is attached in Appendix B.

This rating scale was administered to 29 subjects, 20 males and 9 females. Most of these subjects had many years experience in the Military Police and were very familiar with most of the items of equipment included in the rating form. Each subject rated each item of equipment along each of the three dimensions. The degree to which a subject agreed or disagreed with each statement was recorded in terms of a rating from - 2 (strongly disagree) to +2 (strongly agree). For example, the statement "use of commercial holster improves safety" might be assigned a +1 rating (slightly agree). After each subject completed the rating scale form, mean ratings across subjects for each item along each dimension were calculated.

Interpretation and evaluation of the results of the task analysis relied on both subjective and objective findings. Subjective data was reduced to provide:

- General descriptions of Military Police missions and functions
- Tables of items of equipment in use across sample installations
- Detailed description of selected items of equipment, such as,
  - Tasks performed using an item
  - Operational characteristics of an item
  - Alternative items
  - User requirements.

Objective data was reduced to provide:

- Mean ratings for selected items of equipment along three dimensions; improve safety, reduce crime, and increase effectiveness.

Conclusions and recommendations were based on these findings.

3.   EQUIPMENT/TASK ANALYSIS RESULTS

          The results of the equipment/task analysis are presented in this
section. The results include:

- Mission and functions of four primary Military Police functional
  areas
- Individual descriptions of selected items of equipment
- Mean ratings along three evaluation dimensions of individual
  items of equipment
- Tables of summarized data on items of equipment across four
  sample installations
- Items of equipment recommended for standardization.

          After conducting a series of interviews at a number of installations,
it was found that four functional areas of Military Police Operations utilized
most of the commercial items of law enforcement equipment. The four functional
areas are Station Operations, Patrol Operations, Military Police Investigation,
and Traffic Operations. The mission, functions and associated items of equip-
ment are described for each functional area.

          Based on data collected during the conduct of structured
interviews at designated installation, and data collected from the adminis-
stration of the Rating Scale Instrument, equipment/task descriptions for
individual items of equipment were prepared. These descriptions are organized
according to the four functional areas mentioned above and include:

- Evaluation criteria
- Advantages and disadvantages of operational characteristics
  of the item
- Purpose and use of the item
- Tasks to be performed as the MP uses the item
- User requirements
- Conclusions
- Comparison of alternative items

- Comparison of items across installations
- Recommendations for standardization.

Detailed descriptions were prepared only for those items which were included in the Rating Scale.

In the detailed descriptions, reference was made to the $\overline{X}$ evaluation ratings based on the administration of the rating scale and the data on items of equipment across sample installations presented in the tables. Mean ratings for each item of equipment across 29 subjects were calculated along each of the three evaluation dimensions; improve safety, reduce crime, and increase MP effectiveness. This data is summarized in Appendix C. The data was transformed so that negative numbers do not appear in the ratings. The original scale was:

> -2 = strongly disagree
> -1 = slightly disagree
> 0 = neigher agree/nor disagree, cannot decide, has no relevance
> +1 = slightly agree
> +2 = strongly agree

The new scale is:

> 1 = strongly disagree
> 2 = slightly disagree
> 3 = neither agree/nor disagree, cannot decide, has no relevance
> 4 = slightly agree
> 5 = strongly agree

In general, $\overline{X}$ ratings of 4 or above were considered high and $\overline{X}$ ratings below 4 were considered low. In other words, if an item such as a portable radio received a 4.4 $\overline{X}$ rating along the increase effectiveness dimension, those MPs who were sampled felt that using this item would

increase MP effectiveness. The mean ratings for each item of equip-
ment, however, should be interpreted with caution even though the subjects
who rated these items were experienced and knowledgeable in their field
Since the sample size was small and each subject may not have been equally
familiar with each item of equipment, the ratings may not accurately reflect
the strength of the relationship.

Data collected during the conduct of many structured interviews
with Military Police from different sections at four sample installations
was reduced and is presented in each of six tables. The organization of
the items of equipment in the Tables is based on the four functional areas
described in the Mission and Functions section of this document. The six
equipment categories are:

- Station/Communications Equipment
- Weapons/Patrol Equipment
- Personal Gear/Patrol Equipment
- Vehicles/Patrol Equipment
- Military Police Investigative Equipment
- *Traffic Equipment.*

In each Table, across each of the four installations, information
on each item of equipment is recorded. This information is recorded under
each of the three columns; in use, satisfaction, and preference/comments.
In the first column, a checkmark denotes that the item was available and
was used, whereas a minus sign denotes that the item was not available and
was not used. In the second column, a plus sign indicates that MPs were
satisfied with using the item whereas a minus sign indicates that they were
disatisfied with using the item. In the third column, a preference for
another item is expressed or relevant comments are mentioned. (No marks
in either the first or second column reveal missing data points.) Those
items listed in the tables above the dotted lines were included in the
detailed analysis whereas those listed below the dotted lines were not
included in this analysis.

Finally, at the end of each equipment/task analysis description,
conclusions were drawn and recommendations were made. Those items re-
commended for standardizaiton are listed in the last section.

3.1   Mission and Functions

In the garrison environment, the tasks to be performed by Military Police which require the use of commercial or specialized equipment can be divided into four basic functional areas. These areas are Station Operations, Patrol Operations, Military Police Investigations, and Traffic Operations. For each functional area, there are specific missions to be accomplished, defined tasks to be performed by the Military Police, and required items of equipment to be utilized to assist the MP in performing his job. This section presents the mission, tasks, and items of equipment used for each of the four areas.

3.1.1   Station Operations.

Military Police stations provide a location from which to direct and control Military Police operations, such as law enforcement and traffic control (FM19-10). Personnel such as the desk sergeant, desk clerk, and radio operator operate most of the station and communications equipment. Major equipment items in use are the communications and command console, the recorder, teletype terminal, and the TV monitors.

The operation of a command and control console requires the MP to perform several different tasks. The MP uses the radio to communicate with patrols in the field, with personnel of other related groups such as local police, firemen, etc. He also uses the telephone to communicate with other persons or groups. Further, if the command console has a patching capability, the MP may arrange to have two parties directly communicate with each other. The MP is able to monitor conversations and activites of patrol personnel, and dispatch and track patrols. The tracking task can be performed manually or if an automatic tracking capability is built into the command console, it can be performed automatically.

Personnel stationed at the Military Police desks are authorized by the Department of the Army to record telephone conversations for a

clear and accurate record of emergency communications for command, operational or record purposes. This authorization extends only to reports of emergencies, analysis of reported information, records of instructions or commands, warnings received, requests for assistance, and instructions on locations of serious incidents (FM19-10). A recorder is located in the station which automatically records necessary information for the reasons stated above. This information can be played back at any time.

Teletype terminals are used to obtain information stored in various computer data bases which may be related to a particular event, person, or situation of interest to the MP. The MP operates the terminal by pressing designated keys to input significant information initiating specific commands in order to access the appropriate data base and make the desired retrieval. Once a request is made in this manner, shortly thereafter, the requested data or response will be outputted by the computer in hard copy or soft copy form. Two examples of output might be the name of an individual whose license plate number is HRC-824 and the number and type of previous offenses recorded for John Adams. (In these examples, the underlined portion is know data which is inputted.)

TV monitors may be used in the station for two reasons; to monitor activities around the station entrance and to monitor activities of detainees who are located in detention cells. An MP who monitors these two scenes performs this task at another distant location. Depending on the number of scenes to be monitored and the design of the system, the MP will view one or more displays and operate a set of controls.

3.1.2   Patrol Operations.

Military Police Patrol Operations is an important function of the Military Police. Military Police Patrol primary missions are:

- Protection of life and property
- Crime prevention
- Identification and apprehension of offenders
- Maintanence of order and discipline.

To accomplish these missions, Military Police Patrols question personnel whose actions arouse suspicion, check the identification of all military personnel when so directed, apprehend offenders, and report offenses. They make appropriate on-the-spot corrections of minor violations. Patrols should pay particular attention to reported trouble spots, check such places frequently to observe the conduct of service personnel, and, where possible, visit amusement places near closing time. Patrols also check off limit areas, and take appropriate action if Military Police personnel are present (FM19-10).

To perform specific tasks related to accomplishing various missions, the MP patrol utilizes a wide variety of equipment items. Patrol equipment items can be divided into the following three categories; Weapons, Personal Gear, and Vehicles. In the garrison environment, the MP regularly carries two types of weapons; handgun (45 pistol for males or 38 revolver for females) and nightstick. Also, when it is appropriate, he may carry and use a third type of weapon, a rifle. When necessary, the MP uses his/her handgun to shoot a target at close range, a rifle to shoot a target at long range, and a nightstick to strike a hostile person at close range.

In the garrison environment, the MP is equipped with specific item classified as personal gear. Using these items should enable him to perform his job in an efficient and effective manner. These items can further be classified into four categories; Belt and related Attachments (Leather Gear) Portable Items, Uniforms, and Items Worn on the Uniform. The MP may wear a leather or webbed belt upon which a holster, a nightstick holder, ammunition and ammunition pouch, handirons and handiron holder, and first aid kit and first aid kit holder are attached. He may

carry a flashlight and a radio. He wears either a Class A uniform or Fatiques and a Field Jacket. Finally, he may wear either a badge or a brassard on his uniform.

Vehicles is the final category of patrol equipment to be discussed. To provide patrols mobility, vehicles are made available to them as a means of transportation. Using the vehicle and its associated equipment enables the patrol to cover a large area, to arrive at a scene or incident quickly, to communicate with the station and other patrols, and to transport prisoners. A patrol vehicle may vary in size but it should be equipped with at least the following items; emergency lights, sirens, P.A. system, spotlight, and radio. Commercial vehicles as opposed to quarter ton jeeps are more appropriate for use in the garrison environment. A helicopter is also a possible means of transportation for the patrol which can be used for special missions.

3.1.3   Military Police Investigations.

The investigation of crime is one of the primary functions of Military Police personnel. To provide the Provost Marshal with an investigative capability, the Military Police Investigation Program was established by the Department of the Army. Generally, Military Police investigators are charged with the responsibility to investigate the less serious crimes not within the responsibility of the United States Army Criminal Investigation Division Command (USACIDC). The mission of Military Police is to collect, preserve, and account for physical evidence, conduct interviews to obtain testimonial evidence, and document the results of investigations (FM19-10).

To accomplish the MPI mission, the MPI performs three major tasks: secure evidence and obtain facts at a crime scene, conduct surveillance activities, and assist in solving crimes. To assist him in performing these tasks, the MPI is basically equipped with a weapon (38 revolver) concealed holster, a radio, and a covert vehicle with a kojak light. Specialized equipment is also utilized during the performance of these tasks.

To secure evidence and gather facts at a crime scene, the MPI may utilize the following equipment; camera, latent fingerprint kit, drug field test kit, plaster molding kit, recorder, and evidence bags. A camera is used to provide a permanent record of fragile evidence and to preserve many details of the crime scene (FM19-10). The latent fingerprint kit is used to lift latent fingerprints for further examination. A drug field test kit is used to determine the identity of an unknown substance. A plaster molding kit is used to create a mold of a selected area/cavity such as a footprint. Appropriate physical evidence is placed in evidence bags and testimonial evidence is either recorded in the form of tapes or notes. Items such as evidence safes and gram scales remain at the station for securely storing evidence and weighing a non-narcotic controlled substance, respectively.

To conduct surveillance activities, the MP may utilize the following special items of equipment; binoculars, camera (35mm) and attachments such as a zoom lense, and night vision devices. Binoculars are used to magnify a scene/activity so that one can view the scene from a distance without being noticed. Similarly, a camera with a zoom lense attachment is used to photograph a scene/activity or persons from a distance without being noticed. Moreover, night vision devices are used to enable observation or photography of a scene/activity/persons in darkness without supplementary lighting.

To assist in solving crimes, the Military Police Investigator may utilize the following items of equipment; ultraviolet marking kit, metal detector, identification kit for faces, fingerprint kit, and polaroid stationary camera. An ultraviolet marking kit is used to mark items that may be stolen so that they may be identified at a later time. A metal detector is used to identify metal objects which are out of sight at a particular location or hidden on an individual. The identification kit for faces permits victims of crimes to assist the MPI in identifying a suspect. The fingerprint kit and stationary polaroid camera is used at the station to record relevant characteristics of a suspect/criminal for immediate or future reference.

3.1.4   Traffic Operations.

Military Police Traffic Operations is divided into three major functional areas; installation traffic control, traffic accident investigation and traffic control studies (FM19-25). For purposes of this study, the operations and law enforcement missions of traffic control and the traffic investigation mission is of primary interest since specialized traffic equipment is utilized to conduct these missions.

In general, the role of Military Police in traffic control operations is to:

- Enforce traffic laws, regulations and orders
- Recommend type and location of traffic control devices
- Assist in accident prevention and vehicle safety programs
- Investigate and report traffic accidents
- Operate traffic control points (on the installation) and circulation control points (in the theatre of operations).
- Report information concerning traffic and road usage, progress of movements; perform hasty route reconnaisance; and relay any information of intelligence value.
- Be prepared to implement alternate or temporary routes for traffic
- Actively participate in near area protection and disaster control operations
- Perform traffic escort and convoy escort duties
- Perform other duties involving security, law enforcement and crime prevention. (FM19-25).

Specifically, the role of Military Police in traffic operations is:

- Institute checkpoints to insure proper use of routes, prevent unlawful entry into the installations, etc.
- Set up roadblocks to seal off areas in which a crime has been committed, to apprehend violators, and to limit access to other areas

- Set up administrative dismount points where personnel are re-
  quired to dismount from their vehicles and proceed on foot.
  MP's direct traffic in and out of designated areas

- Provide assistance in traffic control at detour or construction
  sites in order to avoid motorist confusion and congestion

- Provide parking control when necessary to avoid unnecessary
  congestion, abuse, and accident hazards. (FM19-25).

As the MP performs the tasks mentioned above, he utilizes the following
equipment items; traffic cones, traffic wands, barricades, and wheel
immobilizers.

The mission of traffic law enforcement is to make the roads safe
for all traffic and to encourage voluntary compliance with traffic laws by
all motorists (FM19-25). To accomplish this mission, Military Police per-
form two specific functions; monitor vehicles to control speed and determine
whether driving ability is impaired as a result of alcohol or drug use when
a traffic accident or violation occurs.

Military Police use radar equipment as an aid for controlling
speed. They may use traditional or hand held radar (moving or stationary).
When stationary radar is used, the MP sets up the equipment in his vehicle
along the side of the road, and detects and identifies speeding vehicles as
they pass within a designated range. A second patrol vehicle is stationed
nearby where an MP intercepts the speeder and issues a traffic ticket. When
moving radar is used, the MP is able to detect speeding vehicles while he is
moving. Once a violator is detected, he signals to the speeder to pull over
to the side of the road, where the MP issues a traffic ticket.

At the time a traffic violation such as the type mentioned above
or a traffic accident occurs, the MP judges whether alcohol may be a factor
contributing to such an occurrence. To help him make this determination
in the field the MP may administer an alcolizer test to the subject. The
MP may also drive the subject back to the MP station to administer an

3-10

official breath test to determine the alcohol content level of the subject. The subject may or may not submit to such a test. If he submits to this test, the MP calibrates the test instrument and follows the operating procedures specified in the instrucion manual. The subject blows into the item of equipment and the MP adjusts the controls and obtains a reading.

Military Police Traffic Investigators are assigned the mission of reporting and investigating traffic accidents. These investigators perform the following functions:

- Conduct traffic accident investigations
- Complete reports
- Enforce traffic regulations, rules, and orders
- Develop recommendations to reduce traffic accidents and promote safety
- Provide MP and commanders with necessary information to take appropriate action against traffic offenders. (FM19-25).

The first function mentioned above, conduct traffic accident investigation is of primary concern in this study since specialized traffic equipment is utilized at this time. The following tasks are performed by the traffic investigator:

- Locate patrol vehicle
- Care for injured persons and protect property
- Establish traffic control
- Identify and preserve fragile evidence
- Take statements
- Record observations
  - Vehicle final rest position
  - Path of vehicle
  - Vehicle search and inspection
  - Sketches
- Record measurements

- Take photos
- Inspect vehicles(s) for condition and damage
- Clear scene. (FM19-25).

As the MP performs the tasks mentioned above, he utilizes the following equipment items; camera and items in the patrol kit such as first aid kit, blankets, flares, fire extinguisher, measuring devices, etc.

3.2   Equipment/Task Analysis

Detailed descriptions of 50 items* of law enforcement equipment are presented in this section. Further, general conclusions and recommendations for several items not included in the detailed analysis are presented. The organization of this section is based on the four functional a as described in Section 3.1. Items are grouped according to the following six equipment categories:

- Station/Communications Equipment
- Weapons/Patrol Equipment
- Personal Gear/Patrol Equipment
- Vehicles/Patrol Equipment
- Military Police Investigative Equipment
- Traffic Equipment.

---

* Several items not included in the rating scale evaluation form are included in the detailed analysis and two items included in the rating scale are not discussed in detail.

3.2.1 Stations/Communications Equipment.

ITEM NAME: Portable Walkie Talkie Radio
ITEM CATEGORY: Communications
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   4.51
                     Reduce Crime   3.74
                     Increase Effectiveness 4.66

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Enables patrolman to communicate with other persons on net at any time.

              2. Small, portable, easy to carry.

              3. Simple to use.

Disadvantages 1. May not transmit within desired range.

              2. Required "out" time for recharging batteries.

              3. Hilly terrain may restrict transmissions.

PURPOSE/USE:

Enable MP to communicate with the MP desk in the station and with other MP's.

TASKS:

1. Patrols inform MP desk of location, etc.

2. Call MP desk for assistance.

3. Depending on the patching capability of communication console, communicate with persons such as firemen, local police, etc.

USER REQUIREMENTS:

1. Transmit within required range on post.

2. Equipped with at least two channels, one general and one private (especially for MPI).

3. Easy to carry.

4. Easy to use.

5. Clear voice transmissions.

ITEM NAME: Portable Walkie Talkie Radio

6. Small.

7. Easy to maintain.

CONCLUSIONS AND RECOMMENDATIONS:

A portable walkie/talkie radio enables the MP to communicate with the desk/station, other MPs and sometimes other parties. Based on the data summarized in the equipment/task analysis and Table 3.1, the following conclusions can be drawn:

1. Evaluation ratings were extremely high, particularly along the "improve safety" and "increase effectiveness" dimension.

2. From an operational viewpoint, the advantages of using the item far outweigh the disadvantages of using it.

3. Using the item enables the MP to perform a variety of required tasks with confidence since he can communicate with others when necessary.

4. Portable radios were in use across all four installations; every MP interviewed stated that it was essential to carry a radio at all times while on duty. The radio was frequently used and in general, MP's were satisfied with it.

Based on these conclusions and the user requirements specified in the equipment/task analysis, it is recommended that all MP's be equipped with portable radios. The item should be standardized and should meet as many as possible of the specified user requirements, both of which will facilitate training, increase MP efficiency and effectiveness, and reduce overall monetary costs.

Table 3.1 CHECKLIST OF COMMUNICATIONS AND STATION EQUIPMENT ACROSS FOUR SAMPLE INSTALLATIONS

ITEM OF EQUIPMENT	INSTALLATION 1			INSTALLATION 2			INSTALLATION 3			INSTALLATION 4		
	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS
1. PORTABLE WALKIE TALKIE RADIO (PATROL EQUIP)	✓	+		✓	+		✓	+		✓	+	
2. STATIONARY CAR RADIO (PATROL EQUIP)	✓	+		✓	+		✓	+		✓	+	
3. COMMUNICATIONS AND COMMAND CONSOLE W/ PATCHING AND TRACKING CAPABILITY	✓	+	COMPLETE NEW SYSTEM INSTALLED	✓	-	(NO AUTOMATIC TRACKING CAPABILITY) WOULD LIKE UPDATED SYSTEM	-	-	NO CONSOLE; WOULD LIKE NEW SYSTEM, PLANS ARE MADE TO OBTAIN CONSOLE WITH PATCHING CAPABILITY	-	-	PLANS MADE TO OBTAIN NEW SYSTEM BASED ON REQUIREMENTS AND SPECIFICATIONS
4. RECORDER IN STATION	✓	+		✓	+		-	-	RECORDER	✓	-	LARGER RECORDER
5. TELETYPE TERMINALS	✓	+		✓	+		-	-		✓	+	
6. TV MONITORS	-		WILL BE INSTALLED	-			-		WILL BE INSTALLED	✓	+	

ITEM NAME: Stationary Car Radio
ITEM CATEGORY: Communications
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   4.62
                     Reduce Crime   4.22
                     Increase Effectiveness 4.66

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Enables patrolman to communicate with other persons on
                   net (when in vehicle only).

               2. Simple to use.

               3. Greater transmitting power than portable radios.

Disadvantages 1. May not transmit within desired range.

               2. Hilly terrain may restrict transmission.

               3. When it is necessary for a patrolman to leave his
                   vehicle while performing his job, he will be out of
                   communications with other MP's because the radio is
                   not portable.

PURPOSE/USE:

Enable MP to communicate with MP desk in station and with other MP's while
driving a vehicle.

TASKS:

1. Patrols inform MP desk of locations, etc.

2. Call MP desk for assistance.

3. Depending on patching capability of communications console, communicate
with persons such as firemen, local police, etc.

4. Communicate with other MP's while working as a team.

USER REQUIREMENTS:

1. Transmit within required range on post.

2. Equipped with at least two channels, one general and one private
(especially MPI).

ITEM NAME: Stationary Car Radio

3. Easy to use.

4. Clear voice transmissions.

5. Fits in vehicle.

6. Highly desirable to be able to combine portable radio with stationary radio in such a way as to provide patrolman with continuous communications capability.

CONCLUSIONS AND RECOMMENDATIONS:

A stationary car radio enables the MP to communicate with others (MP desk, MP's other police, etc.) while traveling in a vehicle. Based on data summarized in the equipment/task analysis and Table 3.1, the following conclusions can be drawn.

1. Evaluation ratings are very high for all three dimensions; improve safety, reduce crime, and increase effectiveness.

2. From an operational viewpoint, the advantages of using the item far outweights the disadvantages of using it.

3. Using the item enables the MP to communicate with others during performance of his expected duties but only when in the vehicle.

Based on these conclusions and the user requirements specified in the equipment/task analysis, it is recommended that MP vehicles be equipped with mobile units which are compatible with portable radios. Units can be obtained which can function as stationary car radios when the portable radio is inserted into the apparatus and portable radios when the radio is removed from the apparatus. This item should be standardized and should meet as many as possible of the specified user requirements. This will improve safety, facilitate training, increase MP effeciency and effectiveness, and reduce overall monetary costs.

3-18

ITEM NAME: Communications and Command Console with Patching
                      and Tracking Capability

ITEM CATEGORY: Station

ITEM TYPE: Commercial

EVALUATION CRITERIA: Improve Safety   4.11

                      Reduce Crime   3.74

                      Increase Effectiveness 4.48

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provides means for MP desk to communicate with MP patrols
                 in field.

              2. Patching capability facilitates communication between
                 patrols and second party.

              3. Tracking capability allows MP desk to monitor location
                 and status of MP in vehicles.

              4. Other options are also available which enhance communi-
                 cations.

Disadvantages 1. None (except high cost).

PURPOSE/USE:

Provide means to enable MP's to communicate with each other, to monitor
communications, and to direct MP operations.

TASKS:

1. Respond to incoming calls; radio transmission from MP in field, and
phone calls.

2. Notify other patrols in field.

3. Patch patrolman to patrolman.

4. Patch patrol to other groups such as local police, firemen, etc.

5. Track and monitor patrol vehicles.

6. Dispatch patrols/vehicles to scene of crime or accident.

7. Notify other groups such as local police, firemen, rescue squad, etc.

8. Monitor MP operations.

3-19

ITEM NAME: Communications and Command Console with Patching and Tracking
            Capability

USER REQUIREMENTS:

1. Easy to use.
2. Equipped with telephone.
3. Equipped with patching capability.
4. Equipped with tracking capability (desirable).
5. Equipped with several channels (approximately 4).
6. Practical arrangement of equipment.

CONCLUSIONS AND RECOMMENDATIONS:

A communications console with patching and tracking capability provides an
effective and efficient means of communications for the Military Police.
Based on data summarized in the equipment/task analysis and Table 3.1,
the following conclusions can be drawn:

1. Evaluation ratings are high, especially along the "increase in MP
effectiveness" dimension.

2. From an operational viewpoint, there are several strong advantages to
using the item.

3. Using the item enables the MP to perform many important tasks in an
effective and efficient manner.

4. Those installations which have a console with full capability are
satisfied.

5. Those installations which do not have a console are disatisfied.

6. Those installations which do not have a console wish to obtain one.

7. Those installations which have consoles without full capability, wish
to obtain an updated version.

8. The larger the operation, the greater the need to have a communications
console with full capability.

9. The cost of the item is high.

Based on these conclusions and the user requirements specified in the
equipment/task analysis, it is recommended that the larger MP stations
obtain a communications console. The size of the station and operation
should have an impact on the type of console components and capabilities
selected. The item should be standardized and should meet as many as
possible of the specified user requirements, both of which will facilitate
training, ease job transition periods, and, in the long run, reduce over-
all personal and monetary costs.

3-20

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ITEM NAME:            Recorder in Station
ITEM CATEGORY:        Station
ITEM TYPE:            Commercial
EVALUATION CRITERIA:  Improve Safety          3.81
                      Reduce Crime            3.48
                      Increase Effectiveness  4.11
```

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provides easily obtainable record of phone calls to
                  MP station for later reference.

              2. Records conversation automatically.

Disadvantages 1. None (except high cost).

PURPOSE/USE:

Enables MP to examine in detail and at a later time selected segments of
recorded station/caller conversations.

TASKS:

Playback recorded information in order to generate leads, identify voices,
and gather relevant facts, etc.

USER REQUIREMENTS:

1. Automatic recording.

2. Long lasting tapes.

3. Recording quality should enable MP to clearly hear desired infor-
mation without difficulty.

4. Remote location.

CONCLUSIONS AND RECOMMENDATIONS:

A recorder in the MP station enables MP's to thoroughly examine the contents
of all incoming phone converations after the fact. Based on data summarized
in the equipment/task analysis and Table 3.1, the following conclusions can
be drawn.

ITEM NAME: Recorder in Station

1. Evaluation ratings are highest along the "increase in effectiveness" dimension.

2. From an operational viewpoint, use of the item is practically effortless and yet at the same time a large quantity of valuable information is obtained.

3. Using the item enables the MP to gather facts, generate leads, identify voices, etc., after a particular event occurs.

4. Three of the four sample installations had recorders in the station, used them continually, and were satisfied with their function and performance.

5. The installation that did not have a recorder expressed a need for one and was dissatisfied because one was not available to use.

6. Some recorders are very costly.

Based on these conclusions and the user requirements specified in the equipment/task analysis, it is recommended that MP stations be equipped with recorders. The size of the station may have an impact on the size of the recorder. The item should be standardized and should meet as many as possible of the specified user requirements, both of which will facilitate training, ease job transition periods, and, in the long run, reduce overall personal and monetary costs.

ITEM NAME: Teletype Terminals
ITEM CATEGORY: Station
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   3.96
                     Reduce Crime   4.03
                     Increase Effectiveness 4.66

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provides easy and rapid access to relevant crime related
                    information.
Disadvantages   1. Data retrieved is limited by the data stored in the
                    computer data base.

PURPOSE/USE:

Utilization of this item of equipment will enable the MP to rapidly re-
trieve crime related information from a reliable source (computer data base).

TASKS:

1. Query data bases to retrieve information on selected persons, objects,
events, etc.

2. Use keyboard to input request.

3. Receive requested information on printouts or display screens.

USER REQUIREMENTS:

1. Easy to use for querying and retrieving data.

2. Training should be provided.

3. Rapid turn around time.

4. Connect to a variety of data banks.

CONCLUSIONS AND RECOMMENDATIONS:

A teletype terminal enables the MP to rapidly retrieve crime-related in-
formation from various computer data bases. Based on data summarized in
the equipment/task analysis and Table 3.1, the following conclusions

ITEM NAME: Teletype Terminals

can be drawn:

1. Evaluation ratings are very high along each of the following three dimensions; improve safety, reduce crime, and increase effectiveness.

2. From an operational viewpoint, it is advantageous to the MP to be able to quickly and easily gain access to crime related information.

3. Using the item enables the MP to querry a number of data bases, and retrieve a variety of information.

4. Those installations which had teletype terminals used them frequently and were _very_ satisfied.

5. Those installations which did not have this item were dissatisfied and expressed a strong interest in obtaining one.

6. In order to use the item, it is necessary to receive special training.

7. The cost of the item is high.

Based on these conclusions and the user requirements specified in the equipment/task analysis, it is recommended that each MP station obtain a teletype terminal. The location and size of the station will have an impact on the type and number of available data bases to be accessed. The item should be standardized and should meet as many as possible of the specified user requirements both of which will facilitate training, ease job transition periods, and reduce overall personal and monetary costs.

ITEM NAME: TV Monitors
ITEM CATEGORY: Station
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   4.0
                     Reduce Crime   3.14
                     Increase Effectiveness 4.03

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Permit MP to continually monitor detainees without being
                  present at all times.

              2. Permit MP to monitor station entrance area from another
                  location.

Disadvantages 1. None (except high cost).

PURPOSE/USE:

Permits observation of persons or areas in station from another location.

TASKS:

1. Monitor display screens containing TV picture of designated target area.

USER REQUIREMENTS

1. Easy system to use, easy controls.

2. Display screen showing clear picture of designated area.

3. If more than one display screen, practical arrangement of controls
and displays.

CONCLUSIONS AND RECOMMENDATIONS:

TV Monitors in the MP station permit observation of persons or areas from
another more convenient location. Based on data summarized in the equip-
ment/task analysis and Table 3.1, the following conclusions can be drawn:

ITEM NAME: TV Monitors

1. Evaluation ratings are high for the "improve safety" and "increase effectiveness" dimensions.

2. Use of the equipment offers <u>flexibility</u> in monitoring or observing persons or areas in the station.

3. Using the item enables the MP to monitor more than one situation at a time at a distant location.

4. The installation which has this item uses it frequently to monitor prisoners in D-cells and is satisfied with its use.

5. Two of the three remaining installations without this item are planning to install TV monitors.

6. The larger the operation, the greater the need to have TV monitors for the station entrance and D-cells.

7. The cost of the item is high.

Based on these conclusions and the user requirements specified in the equipment/task analysis, it is recommended that the larger MP stations obtain TV monitors. The size of the station will have an impact on the number of monitors required. The item should be standardized and should meet as many as possible of the specified user requirements, both of which will facilitate training, ease job transition periods, and, in the long run, reduce overall personal and monetary costs.

3.2.2   Weapons/Patrol Equipment.

ITEM NAME: Nightstick
ITEM CATEGORY: Weapon/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   3.96
                        Reduce Crime   3.03
                        Increase Effectiveness 3.66

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Serves as secondary hand weapon which is used like a club.

                2. Serves as an extension of one's hand which can be used
                    offensively or defensively.

Disadvantages   1. Sometimes breaks in half when in use.

PURPOSE/USE:

To aid in protecting oneself from criminals or suspects and to aid in pre-
venting criminals and suspects from hurting others or breaking the law.

TASKS:

1. Perform normal MP activities carrying the nightstick.

2. When necessary, pull from holder and hit or strike another person.

3. Use nightstick to prevent a blow from an offender.

4. Pin offender down with nightstick.

USER REQUIREMENTS:

1. Comfortable grip.

2. Sturdy.

3. Appropriate length.

CONCLUSIONS AND RECOMMENDATIONS:

The nightstick is a hand weapon which can be used in an offensive or defensive

manner in order to prevent persons from hurting others or breaking the law and

to protect oneself from hostile persons. Based on data summarized in the

equipment/task analysis and Table 3.2, the following conclusions can be drawn:

Table 3.2 CHECKLIST OF WEAPONS/PATROL EQUIPMENT ACROSS FOUR SAMPLE INSTALLATIONS

ITEM OF EQUIPMENT	INSTALLATION 1			INSTALLATION 2			INSTALLATION 3			INSTALLATION 4		
	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS
1. NIGHSTICK (MIL ISSUE)	✓	+	STRONGER COMM. INFREQUENTLY USED	✓	+	STRONGER COMM. INFREQUENTLY USED	✓	+	STRONGER COMM. INFREQUENTLY USED	✓	+	STRONGER COMM. INFREQUENTLY USED
2. RIFLE (MIL ISSUE)	-		NO REGULAR NEED	-		NO REGULAR NEED	-		NO REGULAR NEED	-		NO REGULAR NEED
3. 45 PISTOL (MIL ISSUE)	✓	+-	MIXED OPINION (FEMALES AND MPI)	✓	+-	MIXED OPINION (FEMALES AND MPI)	✓	+-	MIXED OPINION (FEMALES AND MPI)	✓	+-	MIXED OPINION (FEMALES AND MPI)
4. 38 REVOLVER (MIL ISSUE)	✓	+	(FEMALES AND MPI)	✓	+	(FEMALES AND MPI)	✓	+	(FEMALES AND MPI)	✓	+	(FEMALES AND MPI)

ITEM NAME: Nightstick

1. Evaluation ratings are not particularly high except for the "improve safety" dimension.

2. From an operational viewpoint, the club works effectively and serves its purpose although it is not always strong enough (sometimes it breaks).

3. When necessary, use of this item aids the MP in performing tasks which involve hostile actions between the MP and other persons.

4. Although the nightstick is an important weapon to carry, it was infrequently used at all four sample installations.

Based on these conclusions and user requirements specified in the equipment/task analysis it is recommended that the military issue nightsticks remain the standard hand weapon. Since there is already a large supply of these items; they are already standardized, and; they are used infrequently, it does not appear necessary to recommend any changes to this item.

ITEM NAME: Rifle
ITEM CATEGORY: Weapon/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   3.55
                      Reduce Crime   3.18
                      Increase Effectiveness 3.40

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provides capability of shooting at a target from a distance
                  (long range).

              2. Provides accurate targeting capability.

Disadvantages 1. Bulky.

              2. Not easy to carry.

              3. Restricts use of hands (requires two hands to fire it).

              4. Requires time to aim and fire.

PURPOSE/USE:

Provide MP with capability of long range firing for situations such as terrorist/
sniper incidents, riots, and combat.

TASKS:

1. Aim and fire at long ranges in situations such as terrorist incidents,
sniper incidents, etc.

2. Use rifle to assist in riot control, and possibly some types of guard duty.

3. Use in combat situations.

USER REQUIREMENTS:

1. Light weight (M16).

2. Easy to transport.

3. Accurate at long distances.

CONCLUSIONS AND RECOMMENDATIONS:

A rifle provides the MP with the capability to fire at long range. Based on
data summarized in the equipment/task analysis and Table 3.2, the following

ITEM NAME: Rifle

conclusions can be drawn:

1. Evaluation ratings are not high along the three dimensions.

2. From an operational point of view, the item fulfills its purpose although there are several disadvantages to using it. In general, it is difficult to perform other tasks effectively while carrying or using the rifle.

3. Using the item, enables the MP to perform specific tasks that could not otherwise be performed without using it.

4. The rifle was not in use at all four sample installations. There was no need to use the rifle since specific incidents which would require use of it rarely occurred.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that the military issue rifle (M16) remain the standard. When required, the rifle is available and it can be used to perform necessary tasks.

ITEM NAME: 45 Pistol
ITEM CATEGORY: Weapon/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   <u>3.59</u>
                       Reduce Crime   <u>3.40</u>
                       Increase Effectiveness <u>3.33</u>

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Large weapon - threating in appearance.

                2. Powerful - lots of stopping power.

Disadvantages   1. Heavy

                2. Inaccurate at longer distances.

                3. Delay time before shooting first round because it has
                    has to be cocked.

PURPOSE/USE:

To protect oneself from criminals/suspects and to prevent criminals/suspects
from hurting others or breaking the law.

TASKS:

1. Perform normal MP activities armed with weapon.

2. Draw weapon, pull trigger and fire.

USER REQUIREMENTS:

1. Safe to use.

2. Effective.

3. Accurate within short ranges.

4. Manageable.

ITEM NAME: 38 Revolver, 2in, 4in

ITEM CATEGORY: MPI and Weapons/Patrol Equipment (Females)

ITEM TYPE: Military Issue

EVALUATION CRITERIA:		2in	4in
	Improve Safety	3.18	3.55
	Reduce Crime	2.97	2.86
	Increase Effectiveness	3.0	3.33

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Size is small so it is easy to conceal and easy for a female to handle.

2. Accurate compared to 45.

3. Light - easy to carry.

4. No delay time in firing first round.

Disadvantages 1. Not as much stopping power as 45.

2. Not as threating looking as 45.

PURPOSE/USE:

To protect oneself from criminals, and to prevent criminals/suspects from hurting others or breaking the law.

TASKS:

1. Perform normal MP and MPI activities, armed with 38 revolver.

2. When necessary, retrieve revolver, fire it, and replace it in holster.

USER REQUIREMENTS:

1. Females must have a manageable, and light weight weapon.

2. MPI investigators must have a small, light weight weapon which can be easily concealed.

3. Safe to use.

4. Effective.

5. Accurate within short ranges.

CONCLUSIONS AND RECOMMENDATIONS:

The 45 pistol and 38 revolver are both used by the MP to prevent or deter hostile acts and to protect oneself and others from such hostile acts. In

3-33

ITEM NAME: 38 Revolver, 2in, 4in

serving this purpose, however, females and MPI specifically use the 38 revolver.
Based on the equipment/task analysis and Table 3.2, and Table 3.5, the following
conclusions can be drawn:

1. Evaluation ratings along all three dimensions are approximately the same
for both the 45 pistol and the 38 revolver (2in and 4in).

2. From an operational view point, there are advantages and disadvantages
associated with using each weapon. In general, the 45 pistol has more stopping
power than the 38 revolver, but the 38 revolver is more accurate and easier
to use than the 45 pistol. The 38 revolver is easier to conceal and is more
manageable for females than the 45 pistol.

3. Both the 38 revolver and the 45 pistol provide a means for the MP to deter
crime, prevent crimes, and protect persons.

4. Users of the 38 revolvers (females and MP investigators) at all four in-
stallations were satisfied with the weapon.

5. Many users of the 45 pistol across all four installations were satisfied
with the weapon. However, others expressed some dissatisfaction and prefer-
ence for the 38 revolver.

6. There is a large supply of 45 pistols in the army supply system.

Based on these conclusions and user requirements specified in the equipment/
task analysis, it is recommended that the military issue, 38 revolvers, remain
the standard weapon for females and military police investigators, and the
military issue, 45 pistols, remain the standard weapon for all other military
police.

3.2.3   Personal Gear/Patrol Equipment.

ITEM NAME: Holster
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   2.89
                        Reduce Crime   2.19
                        Increase Effectiveness 2.56

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Holds weapon.

                2. Holds weapon securely.

Disadvantages   1. Delay time in withdrawing weapon from holster since there
                    is a top flap on holster.

PURPOSE/USE:

Hold weapon securely and in a safe manner.

TASKS:

1. Lift flap on holster.

2. Withdraw weapon to fire.

USER REQUIREMENTS:

1. Easy to withdraw weapon.

2. Holds weapon securely

3. Safe to use.

ITEM NAME: Holster
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   <u>3.81</u>
                      Reduce Crime   <u>2.89</u>
                      Increase Effectiveness <u>3.66</u>

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Holds weapon.

                2. Little delay time in withdrawing weapon from holster since
                    there is no flap on the holster

Disadvantages   1. The weapon is not as secure as the military issue holster
                    because there is no flap: however, there is a small
                    leather strap.

PURPOSE/USE:

Holds weapon securely and in a safe manner.

TASKS:

1. Unlatch leather strap.

2. Withdraw weapon to fire.

USER REQUIREMENTS:

1. Easy to withdraw weapon.

2. Holds weapon securely.

3. Safe to use.

CONCLUSIONS AND RECOMMENDATIONS:

(It should be noted that the comments on holster type in this section refer
to holsters designed to carry 45 pistols. The military issue holster for
the 38 revolver has operational characteristics similar to the commercial
holster for the 45 pistol.)

The purpose of using a holster is to provide a means for carrying a weapon.
There are military issue and commercial types of holsters currently in use.

ITEM NAME: Holster (Commercial)

Based on data summarized in the equipment/task analysis and Table 3.3, the
following conclusions can be drawn:

1. Evaluation ratings along all three dimensions are higher for the com-
mercial holster than the military issue holster.

2. The major drawback associated with the military issue holster is that
one's weapon cannot be drawn quickly since it is designed with a top flap.
If time becomes a critical factor in using a weapon, this feature hinders
safety. However, when the weapon is not is use, that is, it is being
carried as the MP performs his normal duties, this feature prevents the
weapon from easily falling from the holster and improves safety.

3. Across all four installations, military police used military issue
holsters but expressed strong dissatisfaction with them and strong pre-
ference for commercial holsters of another style.

4. At three of the four installations, military police used commercial
holsters with a small top leather strap feature and expressed strong
satisfaction with them.

5. Females who used 38 holsters were satisfied with them.

Based on these conclusions and user requirements specified in the equipment/
task analysis, it is recommended that military issue holsters for the 45
be replaced with a commercial holster of a different style and be stan-
dardizied. Standardization of a commercial holster with a small leather
top strap instead of a large top flap would improve safety, increase MP
effectiveness and, in the long run, reduce overall costs.

Table 3.3 CHECKLIST OF PERSONAL GEAR/PATROL EQUIPMENT ACROSS FOUR SAMPLE INSTALLATIONS

ITEM OF EQUIPMENT	INSTALLATION 1			INSTALLATION 2			INSTALLATION 3			INSTALLATION 4		
	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS
1. HOLSTER (MIL ISSUE)	✓	-	COMM. HOLSTER W/LEATHER STRAP	✓	-	COMM. HOLSTER W/LEATHER.STRAP	✓	-	COMM. HOLSTER W/LEATHER STRAP	✓	-	COMM. HOLSTER W/LEATHER STRAP
2. HOLSTER (COMM.)	✓	+	COMM. HOLSTER	✓	+	COMM. HOLSTER	-	-	COMM. HOLSTER	✓	+	COMM. HOLSTER
3. NIGHTSTICK HOLDER (MIL ISSUE)	✓✓	-	COMM. RING	✓✓	-	COMM. RING	✓	-	COMM. RING	✓✓	-	COMM. RING
4. NIGHTSTICK HOLDER (COMM.)	✓	+		✓	+		✓	+		✓	+	
5a. LEATHER BELT (MIL ISSUE)	✓	-	COMM. LEATHER	-								
b. LEATHER BELT (COMM.)	✓	+										
6a. WEB BELT (COMM.)	-			✓	+		-			✓	+	
b. WEB BELT (MIL ISSUE)	-			-			-			-		
7. FLASHLIGHT (MIL ISSUE)	✓	-	COMM. FLASH-LIGHT	✓✓	-	COMM. FLASH-LIGHT	-	-	COMM. FLASH LIGHT	✓	+	COMM. FLASH LIGHT
8. FLASHLIGHT (COMM.)	✓	+		✓	+		✓✓	+		-	-	
9. FIELD JACKET	✓	-	FLIGHT JACKET	-	-	FLIGHT JACKET	-	-	FLIGHT JACKET	✓		FLIGHT JACKET
10. FLIGHT JACKET	-			-			✓	-		✓	-	
11. FATIGUE CAP	✓			✓								
12. WHITE HAT		-	MIXED OPINION	✓	-		✓	-				
13. HELMET LINER										✓	-	CRASH HELMET
14. STEEL POT												
15. BERET												
16. CRASH HELMET					+					✓	+	

PERSONAL GEAR/PATROL EQUIPMENT (Con't)

ITEM OF EQUIPMENT	INSTALLATION 1			INSTALLATION 2			INSTALLATION 3			INSTALLATION 4		
	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS
17. UNIFORM-FATIGUE	✓	+-	BETTER FIT (FEMALES)	✓	+-	BETTER FIT (FEMALES)	✓	+-	BETTER FIT (FEMALES)	✓	+-	BETTER FIT (FEMALES)
18. UNIFORM-CLASS A	✓	-		✓	-		-					
19. HANDIRONS (MIL ISSUE) & HANDIRONS HOLDER	✓	+		✓	+		✓	+		✓	+	
20. AMMUNITION AND AMMUNITION POUCH ON BELT (MIL ISSUE)	✓	+	SOME PREFER COMM. AMMO POUCH	✓	+		✓	+		✓	+	
21. BADGE	✓	+		✓	+		-	-	BRASSARD AND BADGES	✓	-	BETTER QUALITY
22. FIRST AID KIT AND CARRIER ON BELT	✓	+		✓	+		✓	+		✓	+	
23. BRASSARD	-			-			✓	+-	(SOME PREFER BADGES)	-		
24. ARMOR VEST			MIXED RESPONSES			MIXED RESPONSES			MIXED RESPONSES			MIXED RESPONSES

ITEM NAME: Nightstick Holder
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   2.54
                     Reduce Crime   2.04
                     Increase Effectiveness 2.54

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Carries nightstick securely.

Disadvantages 1. Contributes to MP ineffectiveness because it is bulky, uncomfortable, and cumbersome.

              2. Limits ease with which nightstick can be drawn.

PURPOSE/USE:

Holds nightstick securely and in a safe manner.

TASK:

1. Unstrap nightstick.
2. Withdraw nightstick.

USER REQUIREMENTS:

1. Easy to withdraw weapon.
2. Holds weapon securely.
3. Safe to use.
4. Effective to use.
5. Comfortable to wear.

ITEM NAME: Nightstick Holder
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   <u>3.81</u>
                      Reduce Crime   <u>2.89</u>
                      Increase Effectiveness <u>3.66</u>

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Carries nightstick.
                2. Easy to withdraw nightstick from ring holder.
                3. Comfortable.

Disadvantages   1. Nightstick may slide out of holder.

PURPOSE/USE:

Hold nightstick securely and in a safe manner.

TASKS:

1. Withdraw nightstick from holder.

USER REQUIREMENTS:

1. Easy to withdraw weapon.

2. Holds weapon securely.

3. Safe to use.

4. Effective to use.

5. Comfortable to wear.

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of wearing a nightstick holder is to carry a nightstick. At
present, both commercial and military issue nightstick holders are in use.
Based on the data summarized in the equipment/task analysis and Table 3.3,
the following conclusions can be drawn:

1. Evaluation ratings along all three dimensions are higher for the com-
mercial nightstick holder than the military issue nightstick holder.

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ITEM NAME: Nightstick Holder (Commercial)

2. Both types of nightstick holders are functional but the commercial type with a ring holder attached to the belt is more practical than the military issue holder.

3. Across all four installations, military issue nightstick holders were used, but they were used infrequently.

4. Military police expressed dissatisfaction with using military issue holders and preferred using commercial types.

5. Across all four installations, MP frequently used the commercial type of nightstick holder designed with a slip ring and were very satisfied with its use.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that military issue nightstick holders be replaced with a commercial nightstick holder of a different style and be standardized. Standardization of a commercial nightstick holder designed with a slip ring would improve MP safety, help to reduce crime, increase MP effectiveness and, in the long run, reduce costs.

ITEM NAME: Leather Belt
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   2.89
                     Reduce Crime   2.39
                     Increase Effectiveness 2.66

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Holds other necessary equipment.

Disadvantages   1. Has a tendency to slip out of place.

PURPOSE/USE:

Holds other necessary equipment.

TASKS:

1. Buckle belt.

USER REQUIREMENTS:

1. Securely hold necessary equipment.
2. Fit comfortably in order to permit the MP to perform his job effectively.
3. Easy to maintain.
4. Durable.

ITEM NAME: Web Belt
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   3.15
                     Reduce Crime   2.89
                     Increase Effectiveness 3.19

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Holds other necessary equipment.
Disadvantages 1. If it has big gold buckle, it is highly visible.

PURPOSE/USE:

Holds other necessary equipment.

TASKS:

1. Buckle belt.

USER REQUIREMENTS:

1. Securely holds necessary equipment.
2. Fits comfortably (for MP effectiveness).
3. Easy to maintain.
4. Durable.

CONCLUSIONS AND RECOMMENDATIONS:

The MP is issued a belt which holds other required MP equipment. This belt
is either made of leather or webbed material. Also available are commercial
versions of each type of belt. Based on data summarized in the equipment/
task analysis and Table 3.3, the following conclusions can be drawn:

1. Evaluation ratings along all three dimensions of each type of belt are
not very high.

2. At one installation where military issue leather belts are worn, MP's
preferred commercial leather belts because they were more comfortable.

3. At another installation where commercial webb belts are worn, MP's were
dissatisfied with them because they were poorly constructed and did not fit well.

ITEM NAME: Web Belt (Commercial)

4. At two other installations where military issue webb belts are worn,
MP's were generally satisfied with them.

5. There is strong mixed opinion over which type of belt is the most suit-
able and practical for MP work.

Based on these conclusions and user requirements specified in the equipment/
task analysis, it is recommended that steps be taken toward determining the
most appropriate belt to be worn by MP. Once this determination is made,
the selected belt type should be standardized which will result in increased
MP effectiveness and reduced monetary costs.

ITEM NAME: Flashlight
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   3.81
                     Reduce Crime   3.51
                     Increase Effectiveness 3.59

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Small, lightweight.
Disadvantages   1. Weak, batteries run out quickly.
                2. Not sturdy.
                3. Not easy to carry.

PURPOSE/USE:

To aid investigative or patrol work by providing light to dark areas.

TASKS:

1. Turn on flashlight.
2. Search dark areas.

USER REQUIREMENTS:

1. Long lasting flashlight, durable, and heavy duty.
2. Long lasting batteries and strong light.
3. Easy to carry (hands free).
4. Large.

ITEM NAME: Flashlight
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   4.33
                      Reduce Crime   3.70
                      Increase Effectiveness 4.25

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Strong, durable (heavy duty).
                2. Strong illumination.
                3. Easily carried in nightstick ring holder.
                4. Do not have to change batteries often.
Disadvantages   1. None.

PURPOSE/USE:

To aid investigative or patrol work by providing light to dark areas.

TASKS:

1. Reach for flashlight.
2. Turn on flashlight.
3. Search dark areas.

USER REQUIREMENTS:

1. Long lasting flashlight, durable, heavy duty.
2. Longlasting batteries and strong light.
3. Easy to carry (hands free).
4. Large.

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of using a flashlight is to shine light in dark areas, in order
to see persons, objects and scenes. Based on data summarized in the equip-
ment/task analysis and Table 3.3, the following conclusions can be drawn:

ITEM NAME: Flashlight (Commercial)

1. Evaluation ratings along all three dimensions are fairly high for both types of flashlights, but they are higher for the larger commercial flashlight.

2. A flashlight that is stronger in terms of illumination, more durable, and longer lasting than the military issue flashlight is needed.

3. At all four installations, it was found that the military issue flashlight was rarely used and personnel were disatisfied with its performance.

4. General consensus of opinion at all four installations was that a larger commercial type of flashlight was needed to perform the job adequately.

5. Further, some personnel at three of the four installations were using a larger commercial type of flashlight.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that the military issue flashlight be phased out and a larger/stronger commercial flashlight be selected for standardization. This flashlight should meet as many of the user requirements as possible. Standardizing this item of equipment will improve MP safety and increase effectiveness.

ITEM NAME: Field Jacket
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   2.89
                      Reduce Crime   2.39
                      Increase Effectiveness 2.77

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provides a warm protective covering during bad weather.

Disadvantages 1. Very bulky and restricts movement

               2. Female jacket has no lining and does not provide much
                   warmth.

               3. Uncomfortable and awkward to use with regard to strapping
                   belt over outside of jacket.

PURPOSE/USE:

Keep MP warm in cold weather during performance of tasks.

TASKS:

1. Slip jacket on, perform MP tasks in cold and rainy weather during the
winter months.

2. Wrap belt around outside of jacket.

USER REQUIREMENTS:

1. Jacket should provide warmth.

2. Jacket should not interfere with performance of normal MP tasks.

3. Jacket should be comfortable.

4. Jacket should allow high level of maneuverability.

ITEM NAME: Flight Jacket
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Commercial or Military Issue
EVALUATION CRITERIA: Improve Safety   3.42
                       Reduce Crime   2.74
                       Increase Effectiveness 3.38

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provides warm protective covering during bad weather.

              2. The jacket is warm; it is not bulky; and it is comfortable.

              3. The jacket is short so that the belt does not have to be
                  strapped around the outside of the jacket.

Disadvantages 1. None.

PURPOSE/USE:

Keeps MP warm in cold weather during performance of tasks.

TASKS:

1. Slip jacket on to perform regular MP tasks.

USER REQUIREMENTS:

1. Jacket should provide warmth.

2. Jacket should not interfer with performance of normal MP tasks.

3. Jacket should be comfortable.

4. Jacket should allow high level of maneuverability.

CONCLUSIONS AND RECOMMENDATIONS:

Each MP is issued a field jacket which is worn during the cold winter months
to protect him from cold weather. Based on data summarized in the equip-
ment/task analysis and Table 3.3, the following conclusions can be drawn:

1. Evaluation ratings along all three dimensions are lower for the field
jacket than the flight jacket.

2. In general, the ratings for both jackets are not very high.

3. From an operational viewpoint, the flight jacket is more suitable to MP
needs than the field jacket.

ITEM NAME: Flight Jacket

4. The major disadvantage of wearing the field jacket is that the belt must be worn over the jacket since the jacket hangs below the waist. (Whereas the flight jacket is short waisted.) This results in restricted movement and unattractive appearance.

5. The field jacket for females is not as comfortable and protective as the field jacket for males.

6. MP's prefer flight jackets over field jackets but prefer field jackets over class A uniform coats.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that a more appropriate and suitable jacket be considered for MP use. Either the flight jacket or one with similar characteristics (short-waisted and flexible with regard to ease of movement) should be identified. Once an appropriate jacket is identified, it can be recommended for standardization which would increase MP effectiveness.

ITEM NAME: Fatigue Cap

ITEM CATEGORY: Personal Gear/Patrol Equipment

ITEM TYPE: Military Issue

EVALUATION CRITERIA: Improve Safety   2.38

                        Reduce Crime   2.19

                        Increase Effectiveness 2.67

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Light weight cap.

               2. Comfortable.

Disadvantages 1. Does not provide strong protection to head.

               2. Does not have a nice appearance.

PURPOSE/USE:

Headgear is required for two reasons; it is part of the required uniform and it should provide protection to the head.

TASKS:

1. Slip cap on head when wearing uniform and performing the job.

USER REQUIREMENTS:

1. Should provide protection to the head.

2. Should be safe to use.

3. Should be comfortable.

4. Should remain securely on head.

5. Should have a nice appearance.

ITEM NAME: White Hat
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   2.62
                         Reduce Crime   3.37
                         Increase Effectiveness 2.97

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Nice appearance (on males and females).

Disadvantages   1. Difficult to maintain (clean).

                2. Does not provide strong protection for head.

                3. The white hat designed for the female has the tendency to
                4. fall off.

                4. The white hat designed for the male has a tendency to hit
                    the roof of a car when an MP's riding in a patrol car
                    (especially if the car is a compact).

PURPOSE/USE:

Headgear is required for two reasons; it is part of the required uniform and
it should provide protection to the head.

TASKS:

1. Slip hat on head when wearing uniform and performing required tasks on the job.

USER REQUIREMENTS:

1. Should provide protection to the head.

2. Should be safe to use.

3. Should be comfortable.

4. Should remain securely on head.

5. Should have a nice appearance.

ITEM NAME: Helmet Liner
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   3.19
                     Reduce Crime   2.43
                     Increase Effectiveness 3.07

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provides strong protection to head.

Disadvantages   1. Uncomfortable.

                2. Has a tendency to slip out of place and fall off when
                    moving at a rapid pace (running).

PURPOSE/USE:

Headgear is required for two reasons; it is part of the required uniform and
it should provide protection to the head.

TASKS:

1. Put helmet liner on head when wearing uniform and performing tasks on the job.

USER REQUIREMENTS:

1. Should provide protection to the head.

2. Should be safe to use.

3. Should be comfortable.

4. Should remain securely on head.

5. Should have a nice appearance.

ITEM NAME: Steel Pot
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   2.86
                    Reduce Crime   1.82
                    Increase Effectiveness 1.82

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provides strong protection to head.
Disadvantages   1. Very heavy.

                2. Does not improve overall MP appearance.

                3. Uncomfortable to wear all day long while performing MP
                    duties. It is more appropriate for combat duties.

PURPOSE/USE:

Headgear is required for two reasons; it is part of the required uniform
and it should provide protection to the head.

TASKS:

Put steel pot on head when wearing uniform and performing tasks on the job.

USER REQUIREMENTS:

1. Should provide protection to the head.

2. Should be safe to use.

3. Should be comfortable.

4. Should remain securely on head.

5. Should have a nice appearance.

ITEM NAME: Beret
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Commercial or military issue
EVALUATION CRITERIA: Improve Safety   2.0
                      Reduce Crime   2.23
                      Increase Effectiveness 2.18

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Light weight.

                2. Nice Appearance.

Disadvantages   1. Does not provide strong protection to head.

                2. Has a tendency to fall off.

                3. Particularly impractical for females because hairstyles
                    interfere with proper fitting.

PURPOSE/USE:

Headgear is required for two reasons; it is part of the required uniform
and it should provide protection to the head.

TASKS:

1. Put beret on head when wearing uniform and performing tasks on the job.

USER REQUIREMENTS:

1. Should provide protection to the head.

2. Should be safe to use.

3. Should be comfortable.

4. Should remain securely on head.

5. Should have a nice appearance.

ITEM NAME: Crash Helmet *
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Commercial

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT

Advantages   1. Provides strong protection to head.

                2. Has a nice appearance.

Disadvantages   1. Heavy.

                2. Hot to wear during the summer months.

PURPOSE/USE:

Headgear is required for two reasons; it is part of the required uniform
and it should provide protection to the head.

TASKS:

1. Put crash helmet on head when wearing uniform and performing tasks on the job.

USER REQUIREMENTS:

1. Should provide protection to the head.

2. Should be safe to use.

3. Should be comfortable.

4. Should remain securely on head.

5. Should have a nice appearance.

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of wearing headgear is to protect the MP's head and at the same
time reflect the MP's role in the military. Currently, several different
types of headgear are being worn. Based on data summarized in the equipment/
task analysis and Table 3.3, the following conclusions can be drawn:

* This item was not included in the rating scale evaluation form.

ITEM NAME: Crash Helmet

1. None of the evaluation ratings were very high for headgear items.

2. Evaluation ratings were lowest for the steel pot and the beret.

3. The fatigue cap, the white hat, and the beret offer little protection to the head, whereas the steel pot, the helmet liner and the crash helmet offer strong protection.

4. There are advantages and disadvantages associated with wearing each item of headgear.

5. Across all four installations, there is no agreement on which headgear item is the most suitable and appropriate for MP use.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that further consideration be given to determining the most appropriate type of headgear for the MP. Once a suitable type of headgear is determined, (designed, developed, or identified) which meets as many of the user requirements as possible, it should be standardized. This will improve MP safety, increase MP effectiveness and reduce overall monetary costs.

ITEM NAME: Uniform Fatigue
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   3.92
                    Reduce Crime   3.11
                    Increase Effectiveness 4.23

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provides freedom of movement.

               2. Male uniform easy to maintain (since it is permanent press).

Disadvantages 1. Casual uniform is not impressive looking.

               2. Female uniforms are difficult to maintain (they are not permanent press and they need to be starched).

               3. The top of the female uniform does not fit well. It is worn outside the pants and the belt is strapped around the waist.

PURPOSE/USE:

As a requirement in the military, standard clothing is provided which should be neat in appearance and functional/practical.

TASKS

1. Wear uniform while performing.MP tasks.

USER REQUIREMENTS:

1. Does not restrict movement.

2. Comfortable, fits well.

3. Functional/practical.

4. Neat in appearance.

5. Easy to maintain.

ITEM NAME: Uniform-Class A
ITEM CATEGORY: Personal Gear/Patrol Equipment
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   1.93
                     Reduce Crime   2.47
                     Increase Effectiveness 2.08

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Neat, attractive appearance.
Disadvantages 1. Restricts movement.
               2. Female uniform does not fit well.

PURPOSE/USE:

As a requirement in the military, standard clothing is provided which should be neat in appearance and functional/practical.

TASKS:

1. Wear uniform while performing MP tasks.

USER REQUIREMENTS:

1. Does not restrict movement.
2. Comfortable, fits well.
3. Functional/practical.
4. Easy to maintain.
5. Neat/attractive in appearance.

CONCLUSIONS AND RECOMMENDATIONS:

Each MP is issued a uniform that reflects his/her military role and level. MP's are issued Fatigues and Class A uniforms.   Based on data summarized in the equipment/task analysis and Table 3.3, the following conclusions can be drawn:

1. Evaluation ratings along all three dimensions are higher for Fatigues than for Class A uniforms.

ITEM NAME: Uniform-Class A

2.   Evaluation ratings for fatigues are high along two dimensions; improve safety and increase effectiveness.

3.   From an operational point of view, fatigues allow the MP to be more effective than Class A uniforms primarily because fatigues provide better freedom of movement.

4.   Fatigues for males are easier to maintain and fit better than fatigues for females.

5.   Fatigues are not nearly as impressive in appearance as the Class A uniforms. This is particularly true for female fatigues.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that, at this time, current fatigues and Class A uniforms remain as the official MP uniform. However, it is suggested that consideration be given to designing a more appropriate uniform which is practical and neat in appearance, especially for females.

ADDITIONAL CONCLUSIONS AND RECOMMENDATIONS:

Those items which are not included in the detailed equipment/task analysis but are included in Table 3.3, also deserve attention. The following conclusions can be drawn about these items:

1. Military police use and are generally satisfied with using the following items:

- Handirons
- Handiron carrying case
- Ammunition
- Amunition pouch
- First aid kit
- First aid carrying case
- Badge
- Brassard

2. Most MP's preferred badges to brassards.

3. Brassards were infrequently used except at one installation where they were used instead of badges.

4. There was no general consensus of opinion as to whether an armored vest was desired or needed.

Based on these conclusions, it is recommended that the military issue items mentioned above remain the standard for the MP.

3.2.4 Vehicle/Patrol Equipment.

ITEM NAME: Spotlight on Vehicle
ITEM CATEGORY: Vehicle/Patrol Equipment
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   4.48
                     Reduce Crime   4.74
                     Increase Effectiveness 4.92

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Enables MP to see activities, people, scenes, etc., in dark areas near his patrol car.

             2. Provides safe outside environment in which the patrolman operates.

Disadvantage 1. None.

PURPOSE/USE:

The spotlight lights up selected areas around the patrol car at night which provides the MP with good visibility.

TASKS:

1. Scan/search selected areas in the dark.

2. Shine the spotlight on a suspect in another car who has just been pulled over.

3. Direct light to designated area for further observation.

USER REQUIREMENTS:

1. Strong enough to lightup areas around patrol car.

2. Flexible in that it can be directed in any number of directions.

3. Preferably attached to driver's side of car so that the light can be controlled from inside the car.

CONCLUSIONS AND RECOMMENDATIONS:

The spotlight on the vehicle is used at night to light up selected areas around the patrol car. Based on data summarized in the equipment/task analysis and Table 3.4, the following conclusions can be drawn:

Table 3.4 CHECKLIST OF VEHICLES/PATROL EQUIPMENT ACROSS FOUR SAMPLE INSTALLATIONS

ITEM OF EQUIPMENT	INSTALLATION 1			INSTALLATION 2			INSTALLATION 3			INSTALLATION 4		
	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS
1. VEHICLES-SEDAN	✓	-	BETTER CONDITION HEAVY DUTY	✓	-	BETTER CONDITION HEAVY DUTY	✓	-	BETTER CONDITION HEAVY DUTY	✓	-	BETTER CONDITION HEAVY DUTY
2. VEHICLES-COMPACT	✓	-	SEDANS, LARGER CARS	✓	-	SEDANS, LARGER CARS	✓	-	SEDANS, LARGER CARS	✓	-	SEDANS, LARGER CARS
3. EMERGENCY LIGHTS, SIRENS, P.A. SYSTEM	✓	+		✓	+		✓	+		✓	+	
4. DIVIDER BETWEEN FRONT AND BACK SEAT	✓ (few)	+	NEED DIVIDER FOR ALL CARS	✓ (few)	+	NEED DIVIDER FOR ALL CARS	✓ (few)	+	NEED DIVIDER FOR ALL CARS	✓ (few)	+	NEED DIVIDER FOR ALL CARS
5. SPOTLIGHT ON VEHICLE	✓ (few)	+	NEED ON SIDE OF ALL VEHICLES	✓ (few)	+	NEED ON SIDE OF ALL VEHICLES	✓ (few)	+	NEED ON SIDE OF ALL VEHICLES	✓	+	CURRENTLY ON TOP OF VEHICLE
6. HELICOPTERS	-			-			-		COULD USE	-		COULD USE
6. JEEPS	-			✓	-		✓	-	SEDANS			

ITEM NAME: Spotlight on Vehicle

1. Evaluation ratings were very high along all three dimensions; improve safety, reduce crime, and increase effectiveness.

2. There are no disadvantages associated with the use of the spotlight: There are only advantages.

3. Use of the spotlight enables the MP to search and clearly view selected areas or persons.

4. Not all installations had spotlights on each vehicle.

5. Across all four installations, a need to have spotlights on all vehicles and a preference for spotlights to be attached to the side of vehicles was expressed.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that a spotlight which is attached to the left side of a vehicle be included in the police package for each vehicle. The item should be standardized and should meet as many of the specified user requirements as possible, both of which will increase MP effectiveness, improve MP safety, and help to reduce crime and reduce overall personal and monetary costs.

ITEM NAME: Helicopter
ITEM CATEGORY: Vehicle/Patrol Equipment
ITEM TYPE: Commercial and Military Issue
EVALUATION CRITERIA: Improve Safety   4.03
                     Reduce Crime   4.63
                     Increase Effectiveness 4.74

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Covers large areas efficiently.

               2. Provides high maneuverability, flexibility, and mobility.

Disadvantages 1. High cost.

PURPOSE/USE:

Provides means to monitor, patrol, and search large areas from above.

TASKS:

1. Patrol and monitor events such as traffic, crowds, borders, road blocks, stakeouts, parking lots, etc.

2. Detect marijuana fields, poachers, trespassers, damaged objects, abandoned cars, etc.

3. Track suspicious vehicles, hit and run drivers, suspected criminals and accomplices and poachers, etc.

4. Search for fugitives and escape routes, victims, and lost persons, and missing vehicles, etc.

USER REQUIREMENTS:

1. Small vehicle with at least two seats.

2. Vehicle equipped with radio, spotlight, emergency kit.

3. Prefer vehicle equipped with radar equipment.

4. Safe to use.

5. Easy to maintain.

CONCLUSIONS AND RECOMMENDATIONS:

A helicpoter broadens and expands the military police capability of performing specific law enforcement functions. Based on data summarized in the equipment/

ITEM NAME: Helicopter

task analysis and Table 3.4, the following conclusions can be drawn:

1. Evaluation ratings are high along all three dimensions; improve safety, reduce crime, and increase effectiveness.

2. From an operational point of view, it permits large areas to be efficiently patrolled, and provides high maneuverability, flexibility, and mobility.

3. Use of the helicopter enables selected tasks to be performed in a more efficient manner than they might otherwise be performed.

4. Three of the four sample installations were not equipped with helicopters; however, personnel at two of the three installtions expressed an interest in having them available.

5. Personnel at the installation which was equipped with helicopters were extremely satisfied with them.

6. The size and location of an installation should determine whether or not a helicopter is needed to assist the MP perform his job.

7. The cost of a helicpoter is extremely high.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is _not_ recommended, at this time, that helicopters be standardized. Although helicopters can be an extremely valuable assest to the military police, the cost is extremely high and they may only be appropriate for use at selected military police installations.

ITEM NAME: Vehicle-Sedan
ITEM CATEGORY: Vehicle/Patrol Equipment
ITEM TYPE: Commercial
EVALUATION FUNCTION: Improve Safety   4.51
                      Reduce Crime   4.40
                      Increase Effectiveness 4.70

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. A vehicle with four doors facilitates the process of
                  loading, transporting, and unloading prisoners.

              2. Since the sedan is usually large, it provides adequate space
                  for carrying passengers, transporting prisoners, and
                  carrying patrol paraphenalia such as patrol kits.

Disadvantages 1. The car may be in poor condition, with over 100,000 miles
                  registered on the odometer.

              2. The car may not have heavy duty suspension, etc.

              3. Problems may be encountered in maintaining the vehicle.

PURPOSE/USE:

To provide transportation to MP as they perform their required tasks.

TASKS:

1. Patrol designated areas.

2. Transport prisoners.

3. Transport citizens in need of help.

4. Transport traffic investigators to scene of accident.

5. (Unmarked vehicle) - transport MPI to scene of crime.

6. Use attached equipment.

7. Chase suspect.

USER REQUIREMENTS:

1. Easy to maintain.

2. Room to carry other persons or equipment.

ITEM NAME: Vehicle-Sedan

3. Safe to drive (proper suspension, etc. and large enough to provide adequate protection).

4. Provides effective means to load and unload prisoners.

5. Provides protection from prisoners (contains large front/back seat divider).

6. Contains emergency equipment, P.A. system, emergency lights, spotlight and radio.

ITEM NAME: Vehicle-Compact
ITEM CATEGORY: Vehicle/Patrol Equipment
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   3.22
                      Reduce Crime   3.85
                      Increase Effectiveness 3.81

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Car will cost less to purchase and maintain than a
                   larger car.

Disadvantages   1. Less space in the car will make it more difficult to per-
                   form some MP activities: such as transporting passengers
                   or prisoners and mounting and carrying required equipment.

                2. A smaller car may not be equipped with heavy duty equip-
                   ment and may not provide maximum protection to the driver
                   when it is necessary for the car to be driven at high
                   rates of speed.

                3. The car may be in poor condition with over 100,000 miles
                   registered on the odometer.

                4. Problems may be encountered in maintaining the vehicle.

PURPOSE/USE:

To provide transportation to MP as they perform their required tasks.

TASKS:

1. Patrol designated areas.
2. Transport prisoners.
3. Transport citizens in need of help.
4. Transport traffic investigators to scene of accident.
5. (Unmarked vehicle) - transport MPI to scene of crime.
6. Use attached equipment.
7. Chase suspect.

USER REQUIREMENTS:

1. Easy to maintain.
2. Room to carry other persons or equipment.

3-70

ITEM NAME: Vehicle-Compact

3. Safe to drive (proper suspension, etc., and large enough to provide adequate protection).

4. Provides effective means to load and unload prisoners.

5. Provides protection from prisoners (contains large front/back seat divider).

6. Contains emergency equipment, P.A. system, emergency lights, spotlight and radio.

CONCLUSIONS AND RECOMMENDATIONS:

A vehicle provides necessary transportation to the military police as they perform their required tasks. Currently, a variety of cars, differing in size, type and quality are in use. Based on data summarized in the equipment/ task analysis and Table 3.4, the following conclusions can be drawn:

1. Evaluation ratings of sedans are very high along the three dimensions; improve safety, reduce crime and increase effectiveness.

2. Evaluation ratings of compact cars along the same three dimensions are not nearly as high.

3. From an operational point of view, a sedan and a larger car provides more space to perform necessary tasks and carry necessary equipment.

4. Combat vehicles (e.g. jeeps) are inappropriate for use in the garrison environment.

5. General consensus of personnel at all four installations is:

- A vehicle should be in good operating condition (a majority of vehicles were not in satisfactory operating condition).
- A vehicle should be equipped with heavy duty suspension, heavy duty engine, etc.
- A vehicle should be equipped with police package to include emergency lights, siren and PA system, divider between front and back seat, spot light, and patrol kit.
- A vehicle should be mid-size to large, preferably a sedan.
- A vehicle should be easy to maintain.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that vehicles be standardized. Further, a means for obtaining appropriate vehicles with standardized police packages at a reasonable cost should be pursued. This will serve to facilitate train-ing, increase MP effectiveness, improve MP safety, reduce crime, and reduce, in the long run, overall personal and monetary costs.

ITEM NAME: Emergency Lights, Sirens and P.A. System on Vehicle

ITEM CATEGORY: Vehicle/Patrol Equipment

ITEM TYPE: Commercial

EVALUATION CRITERIA: Improve Safety   4.90

                      Reduce Crime   4.55

                      Increase Effectiveness   4.85

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Alerts others (visually and aurally) of an emergency so
                  that a route will not be obstructed.

              2. Provides visual, aural and verbal message to others.

              3. P.A. system permits MP to clearly communicate with small
                  or large number of people at a distance.

Disadvantages 1. None.

PURPOSE/USE:

Notifies others of an emergency.

TASKS:

1. Upon notice of emergency, turn on emergency lights and sirens while
traveling to desired scene.

2. If necessary, at scene, use P.A. system to communicate with others located
at a distance.

USER REQUIREMENTS:

1. Easy to use.

2. Effective P.A. system, that is, one that clearly transmits message.

3. Siren that is loud enough so that others will clearly hear it.

4. Emergency lights that are noticeable so that others will be alerted.

CONCLUSIONS AND RECOMMENDATIONS:

The emergency police package alerts/notifies others of an impending emergency.
Based on data summaried in the equipment/task analysis and Table 3.4, the
following conclusions can be drawn:

3-72

ITEM NAME: Emergency Lights, Sirens and P.A. System on Vehicle

1. Evaluation ratings are very high along all three dimensions; improve safety, reduce crime and increase effectiveness.

2. There are only advantages associated with using this item.

3. Most of the vehicles at each of the four installations were equipped with a police package.

4. Personnel at each installation expressed a definite need to have an emergency police package on every vehicle (except covert vehicles).

5. The type of police package within and across installations varied.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that this item be standardized and incorporated in a police package for each vehicle.

ITEM NAME: Divider Between Front and Back Seat
ITEM CATEGORY: Vehicle/Patrol Equipment
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve safety   <u>4.96</u>
                     Reduce Crime   <u>3.25</u>
                     Increase Effectiveness <u>4.44</u>

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provides protection to MP who is transporting a prisoner.

               2. Particularly useful when only one MP is transporting a
                   prisoner.

Disadvantages 1. Cars must be modified before they can be installed.

PURPOSE/USE:

Divide space between back and front of patrol car so that a prisoner located in
the back seat cannot harm an MP located in the front seat.

TASKS:

1. There are no tasks to be performed while using this item. Once the equip-
ment is installed, it provides protection to the MP when he is transporting
a prisoner.

USER REQUIREMENTS:

1. Divider should be made of strong material that cannot be easily penetrated
(thick wire or plexiglass).

2. Divider should be firmly positioned between top of front seat and ceiling
of car.

CONCLUSIONS AND RECOMMENDATIONS:

A divider between the front and back seat of a vehicle provides protection to
the MP from a hostile prisoner who is riding in the backseat. Based on data
summarized in the equipment/task analysis and Table 3.4, the following con-
clusions can be drawn:

1. Evaluation ratings are very high along two dimension; improve safety and
increase effectiveness.

ITEM NAME: Divider Between Front and Back Seat

2. Once the item is installed, it offers automatic protection to the MP.

3. Some vehicles at each of the four installations were equipped with these dividers. General consensus of opinion was that dividers should be installed in all vehicles.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that this item be standardized and incorporated in the police package for each vehicle. This will result in improved safety and increased effectiveness and will reduce overall cost.

3.2.5   Military Police Investigative Equipment.

ITEM NAME: Camera 35mm
ITEM CATEGORY: MPI and Traffic
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   2.58
                        Reduce Crime   3.30
                        Increase Effectiveness 3.84

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provide high quality photographs which permit detailed
                  observations

Disadvantages 1. May be complicated to use.
              2. Costly.

PURPOSE/USE:

Provides accurate description of observations (suspicious behavior) and crime
scenes (evidence). Provides accurate description of traffic accident scenes.

TASKS:

1. Perform surveillance activities (with zoom lense attachments).

2. Conduct case studies after crime has been committed at the crime scene.

3. Identify items of evidence.

4. Conduct traffic investigation after a traffic accident has occurred.

USER REQUIREMENTS:

1. Simple and easy to use.

2. Average quality.

3. Permit attachments if necessary.

4. 50mm lense.

5. Easy to carry.

6. (Immediate film development is not necessary.)

3-76

ITEM NAME: Camera Polaroid (Portable)
ITEM CATEGORY: MPI and Traffic
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   2.58
                     Reduce Crime   3.03
                     Increase Effectiveness 4.23

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Provides photos quickly.

Disadvantages 1. Does not provide detailed photos.

PURPOSE/USE:

Provides description of crime scenes and traffic accidents scenes.

TASKS:

1. Conduct case studies after crime has been committed at crime scene.

2. Conduct traffic investigation after a traffic accident has occurred.

3. Identify items of evidence.

USER REQUIREMENTS:

1. Simple and easy to use.

2. Average quality.

3. Permit flash attachment.

4. Easy to carry.

5. (Immediate film development is not necessary.)

ITEM NAME: Camera Stationary Polaroid
ITEM CATEGORY: MPI
ITEM TYPE: Miliary Issue

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Quickly provides pictures of suspects who are brought into
                   the station.

Disadvantages 1. None.

PURPOSE/USE:

Provides quick identification/mug shots of suspects or prisoners.

TASKS:

1. Process suspects or criminals in the station.

USER REQUIREMENTS:

1. Simple and easy to use.

2. Low to average quality.

3. Permit flash attachments.

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of using a camera is to photograph selected scenes, persons, or
objects (evidence). Generally, military police investigators and traffic
investigators need to use a camera. Currently in use are two types of
cameras; 35mm and polaroid (portable and stationary). Based on data sum-
marized in the equipment/task analysis and Tables 3.5 and 3.6, the following
conclusions can be drawn.

1. Evaluation ratings along all three dimensions are similar for both the
35mm and polaroid camera.

Table 3.5 CHECKLIST OF MILITARY POLICE INVESTIGATIVE EQUIPMENT ACROSS FOUR SAMPLE INSTALLATIONS

ITEM OF EQUIPMENT	INSTALLATION 1			INSTALLATION 2			INSTALLATION 3			INSTALLATION 4		
	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS
1. 35mm CAMERA	✓	+		-	-	35mm CAMERA	-	-	35mm CAMERA	-	-	35mm CAMERA
2. POLAROID (PORTABLE)	✓	+		✓	-	35mm CAMERA	✓	-	35mm CAMERA	✓	-	
3. POLAROID (STATIONARY MIL ISSUE)	✓	+		✓	+		✓	+	TOE	-		
4. LATENT FINGERPRINT KIT (MIL ISSUE)	✓	-	LATENT FINGER- PRINT KIT COMM	✓	-	LATENT FINGER- PRINT KIT COMM	✓	-	LATENT FINGER- PRINT KIT COMM	✓	+	
5. LATENT FINGERPRINT KIT (COMM)	✓	+		✓	+		-	+		✓	+	
6. DRUG FIELD TEST KIT	✓	+		✓	+		✓	+		✓	+	
7. NIGHT VISION DEVICES	✓	+	CURRENTLY LEASING	-	-	NIGHT VISION DEVICES	-	-	NIGHT VISION DEVICES	✓	+	COULD USE NIGHT VISION DEVICES
8. BINOCULARS (MIL ISSUE)	✓	+	COMMERCIAL	✓	+		✓	+ TOE	COULD USE OWN	✓	+	BORROWED FROM ANOTHER UNIT
9. CONCEALMENT HOLSTERS	✓	+		✓	+		✓	+		✓	+	
10. REVOLVER*	✓	+		✓	+		✓	+		✓	+	
11. KOJAK LIGHT	✓	-		✓	-	MORE AND BETTER QUALITY	✓			✓	-	
12. COVERT VEHICLES	✓	-	MORE AND BETTER QUALITY	✓	+		✓	-	MORE AND BETTER QUALITY	✓	+	MORE AND BETTER QUALITY
13. MOLDING KIT	✓	+		-	-		-	-		-	-	
14. METAL DETECTOR (LARGE)	✓	+		-			-	-		-		
15. METAL DETECTOR (HANDHELD)	-			✓	+		-			-		

MILITARY POLICE INVESTIGATIVE EQUIPMENT (Con't)

ITEM OF EQUIPMENT	INSTALLATION 1			INSTALLATION 2			INSTALLATION 3			INSTALLATION 4		
	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS
16. ULTRAVIOLET MARKING KIT	✓	+		✓	+		-			-		
17. EVIDENCE BAGS	✓	-	HEATED SEALS	✓	-	HEATED SEALS	✓	-	COULD USE ZIP LOCK	-		
18. GRAM SCALES	✓	+		-			✓	-				
19. IDENTIFICATION KIT FOR FACES	✓	+	COULD USE			COULD USE	-		COULD USE	-		COULD USE
20. CREDENTIAL CASE			COULD USE			COULD USE			COULD USE			
21. BODY ARMOR			COULD USE			COULD USE						
22. WORD PROCESSOR						COULD USE	✓		COULD USE			
23. EVIDENCE SAFE	✓	-	COULD USE DIFFERENT TYPE	✓	+[2]		✓	-	COULD USE DRAWER SAFE	-		
24. RECORDER				- ✓	+		✓	+		✓	+	NOT OFTEN USED
25. MICROFISCHE PROJECTOR	-[1]			✓			✓	+		- ✓	+	
26. FINGERPRINT KIT- SMALL	✓	+		✓	+		✓	+				
27. CRIME SCENE PRO- CESSING KIT				-			-			-		COULD USE

* THIS ITEM IS DISCUSSED IN THE EQUIPMENT/TASK ANALYSIS FOR WEAPONS/PATROL EQUIPMENT.

1 INFREQUENT USE.

2 SMALL LOCKERS.

3-80

ITEM NAME: Camera Stationary Polaroid

2. The major advantage of using a 35mm camera as compared to using a polaroid is that a greater/finer level of detail can be achieved.

3. Using a camera (portable) permits traffic investigators and military police investigators to perform required job functions.

4. Across all four installations, for both traffic and military police investigative work, most personnel used a polaroid (portable) and were dissatisfied with using it because photos did not show enough needed detail. A strong preference for a 35mm was expressed.

5. A 35mm was used in the MPI section at one installation. Personnel using this camera were satisfied with it.

6. MPI sections at three of four installations were equipped with stationary polaroid cameras. Personnel were satisfied with these cameras.

7. A 35mm camera is costly.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that for both MPI and traffic sections, the most suitable commercial 35mm camera be identified and standardized. This will alleviate the need to obtain and use portable polaroids although stationary polaroids will remain in use. Standardizing this item will facilitate training, help to reduce crime, increase MP effectiveness and, in the long run, reduce overall costs.

ITEM NAME: Drug Field Test Kit
ITEM CATEGORY: MPI
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   2.74
                     Reduce Crime   3.61
                     Increase Effectiveness 4.42

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Permits rapid screening of substances suspected of being
                   non-narcotic drugs.

               2. It is easy to use because each test pack contains the
                   chemicals required to perform the test in sealed glass
                   ampules.

Disadvantages 1. None.

PURPOSE/USE:

To determine whether a substance is a non-narcotic drug.

TASKS:

1. Obtain sample of suspected drug.

2. Mix sample with given chemicals in bag.

3. Determine results of test by observing color changes in mixture.

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of using a drug field test kit is to determine the nature of a
given substance. At present, drug test kits for several different drugs are
in use. Based on data summarized in the equipment/task analysis and Table
3.5, the following conclusions can be drawn:

1. Evaluation ratings for this item are highest along the increase effec-
tiveness dimension.

2. There are no disadvantages of using this item.

ITEM NAME: Drug Field Test Kit

3. This kit was frequently used at all four installations and personnel were satisfied with it.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that this item be standardized. Standardization will reduce costs and increase MP effectiveness.

AD
A073 722

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

ITEM NAME: Binoculars
ITEM CATEGORY: MPI
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   3.66
                      Reduce Crime   4.07
                      Increase Effectiveness 4.48

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Allows investigator to observe activities from a distance
                    by magnifying the desired objects.

Disadvantages   1. None.

PURPOSE/USE:

To permit surveillance activities to be conducted at a distance from the scene.

TASKS:

1. Conduct surveillance activities from a distance.

2. Scan the scene with the binoculars to pin-point specific areas or
persons of interest to observe.

USER REQUIREMENTS:

1. Enable investigator to view criminal activities from a distance.

2. Magnifies objects.

3. Easy to carry, and to use (that is, not bulky and heavy).

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of using binoculars is to clearly view from a distance, desired
persons, objects, or scenes during an investigation. Based on data summarized
in the equipment/task analysis and Table 3.5, the following conclusions can
be drawn:

1. Evaluation ratings are fairly high along two dimensions; reduce crime
and increase effectiveness.

ITEM NAME: Binoculars

2. Military Police Investigators used military issue binoculars at all
four installations. They were satisfied with using these binoculars.
However, some persons expressed a desire to obtain a less bulky (commercial)
pair of binoculars which would be more appropriate and accessable.

Based on these conclusions and user requirements specified in the equipment/
task analysis, it is recommended that the military issue binoculars remain
the standard item.

ITEM NAME: Night Vision Devices
ITEM CATEGORY: MPI
ITEM TYPE: Military Issue
EVALUATION CRITERIA   Improve Safety   4.03
                        Reduce Crime   4.40
                        Increase Effectiveness 4.48

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantage   1. Permits easy observation of suspects or activities of
                    a potential crime scene in the dark.

Disadvantage   1. None (except cost).

PURPOSE/USE:

To permit performance of surveillance activities in the dark.

TASKS:

1. Conduct surveillance activities in the dark or in unlighted areas of
interest.

USER REQUIREMENTS:

1. Enable investigator to view potential crime scene or other suspicious
activities in the dark.

2. Should not interfere with conducting normal surveillance activities (that
is, they should not be awkward or clumsy to use).

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of using night vision devices is to permit surveillance activities
to be conducted at night. Viewing a scene at night through these devices is
like viewing the same scene in the daylight. Based on data summarized in the
equipment/task analysis and Table 3.5, the following conclusions can be drawn:

1. Evaluation ratings are high along all three dimensions; improve safety,
reduce crime, and increase effectiveness.

ITEM NAME: Night Vision Devices/Goggles

2. These devices were used at one of four installations. Personnel were satisfied with using them.

3. The three other installations did not have easy access to these devices but expressed a desire and need to use them.

4. The cost of these devices is very high.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that the military issue night vision devices be made available to MPI sections when they are needed.

ITEM NAME: Concealment Holsters
ITEM CATEGORY: MPI (Personal Gear)
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   2.67
                     Reduce Crime   2.38
                     Increase Effectiveness 2.67

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Permits investigator to successfully conceal his weapon.
Disadvantages 1. None

PURPOSE/USE:

Enables investigator to secure and conceal his weapon.

TASKS:

1. Performs normal MPI activities with weapon concealed.

2. If investigator needs to use his weapon, he may either retrieve it from a belt holster, a pocketbook holster, or a shoulder holster.

USER REQUIREMENTS:

1. Comfortable to wear.
2. Weapon is easily accessible.
3. Cannot be seen by others.
4. Fits a 38 weapon.
5. Secures weapon.

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of using a concealment holster is to hide the fact that a weapon is being carried. Several different types of concealment holsters are currently in use. Based on data summarized in the equipment/task analysis and Table 3.5, the following conclusions can be drawn:

3-88

ITEM NAME: Concealment Holsters

1. Evaluation ratings along all three dimensions are not very high. (This is inconsistent with other information collected during this study. A possible explanation for such low ratings could be that the specifc purpose, MPI work, for using concealment holsters was not mentioned when administering the rating scale.)

2. Some military police investigators at all four installations purchased their own concealment holsters. All MPI's felt that these holsters were needed.

3. Military police investigators were satisfied with the different types of concealment holsters such as pocketbook holster, shoulder holster, and belt holster.

4. Currently, there is no provision in the military supply system to equip an investigator with an appropriate concealment holster.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that concealment holsters be standardized and made available to military police investigators.

ITEM NAME: Covert Vehicle
ITEM CATEGORY: MPI
ITEM TYPE: Commercial

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantage   1.   Provides transportation to investigators without calling
                      attention to them.

Disadvantage   1.   In emergency situations, the vehicle may not be clearly
                      perceived as an emergency vehicle.

PURPOSE/USE:

Permits investigator to carry out MPI duties and activities undercover.

TASKS:

1. Conduct surveillance activities while moving from one place to another.

2. Conduct surveillance of moving targets.

USER REQUIREMENTS:

1. Reliable unmarked car.

2. A car that is not easily noticed or recognized.

3. Medium to large size car or van.

4. Does not have to have heavy duty equipment since most of the time the car is used for normal transportation.

5. Needs car radio with regular frequencies and one channel just for MPI.

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of using a covert vehicle is to provide transportation to military police investigators without calling attention to the vehicle. Based on data summarized in the equipment/task analysis and Table 3.5, the following conclusions can be drawn:

3-90

ITEM NAME: Covert Vehicle

1. Covert vehicles were in use at all four installations.

2. Personnel at all four installations were dissatisfied with the covert vehicles because they were in very poor condition.

3. General consensus of opinion was that a covert vehicle could be a medium sized unnoticeable car which does not require heavy duty equipment or a police package.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that these vehicles be standardized. (Refer to discussion on vehicles in vehicle/patrol equipment section.)

ITEM NAME: Kojak Light
ITEM CATEGORY: MPI
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   2.97
                     Reduce Crime   2.89
                     Increase Effectiveness 3.11

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Portable red blinking light--works when plugged into car
                  cigarette lighter.

              2. Flexible when needed.

Disadvantages 1. Not as stable as built in lights.

PURPOSE/USE:

To signal others that those riding in a covert police car are, in fact,
policemen.

TASKS:

1. When an investigator quickly needs to move from one location to another in
an unmarked car, he needs to attach the kojak light to the top of his car, so
that others will not obstruct his path.

2. The investigator must attach the light to the roof of the car and plug the
other end of the wire into the cigarette lighter in the vehicle.

USER REQUIREMENTS:

1. The light needs to be noticeable.

2. Easy to attach to roof and cigarette lighter.

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of using a kojak light is to alert "others" of an emergency when
traveling in an unmarked car. Based on the data summarized in the equipment/
task analysis and Table 3.5, the following conclusions can be drawn:

1. Evaluations ratings along all three dimensions were not high.

2. A kojak light was in use at one of the installations. However, it was
not used frequently and investigators were not satisfied with its use.

ITEM NAME: Kojak Light

3. In general, it was felt that there really wasn't any need for using this light. Most of the time, the MPI is not traveling in an emergency mode : When he is, it is awkward to use the light.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that this item not be standardized.

ITEM NAME: Latent Finger Print Kit
ITEM CATEGORY: MPI
ITEM TYPE: Military Issue
EVALUATION CRITERIA: Improve Safety   3.96
                     Reduce Crime   3.07
                     Increase Effectiveness 3.76

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Permits investigator to take latent prints.
Disadvantages 1. Heavy to carry.
              2. Complicated to use.
              3. Has to be used in moderate temperatures.
              4. Hard to detect fingerprints while using it.
              5. Parts of the kit are not used at all because of awkardness
                 because they are unnecessary.
              6. Item that are more up to date are not included in the kit.
              7. Obsolete.

PURPOSE/USE:

To obtain latent fingerprints at the scene of a crime in order to identify a
suspect and to assist in solving the crime.

TASKS:

1. Search for latent finger prints at scene of crime.
2. Use items provided in kit to discover and obtain latent fingerprints.

USER REQUIREMENTS:

1. Easy to use.
2. Quick to use.
3. Easy to carry kit.
4. Effective in use (i.e., picks up prints accurately)

ITEM NAME: Latent Finger Print Kit
ITEM CATEGORY: MPI
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   2.12
                      Reduce Crime   3.07
                      Increase Effectiveness   3.76

GENERAL OPERATING CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Permits investigator to obtain latent fingerprints quickly,
                    easily, and effectively.

Disadvantages   1. There are some items included in the kit which may not
                    always be used.

PURPOSE/USE:

To obtain fingerprints at the scene of a crime to identify suspects and to
assist in solving the crime.

TASKS:

1. Search for latent fingerprints at scene of crime.

2. Use items provided in kit to discover and obtain latent fingerprints.

USER REQUIREMENTS:

1. Easy to use.

2. Quick to use.

3. Easy to carry.

4. Effective in use (i.e., picks up prints accurately).

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of using a latent fingerprint kit is to obtain latent fingerprints
at the scene of a crime in order to identify suspects. Both military issue
and commercial latent fingerprint kits are currently in use. Based on data
summarized in equipment/task analysis and Table 3.5, the following conclusions
can be drawn:

ITEM NAME: Latent Finger Print Kit

1. Evaluation ratings along all three dimensions for the military issue kit were similar to those ratings for the commercial kit.

2. The military issue kit was in use of at three of the four installations; however, personnel were dissatisfied with its use and consequently used it infrequently.

3. The commercial kit was in use at three of four installations. Personnel were satisfied with its use and used it more frequently than the military issue kit.

4. Only some items in the commercial kit were frequently used.

5. To properly use some of the items in a kit, a military police investigator would require special training.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that a commercial latent fingerprint kit be standardized.

It may be desirable to determine which items are essential to performing required tasks. This will influence the type of kit to be designed or selected for standardization. Standardization will facilitate training, increase effectiveness , and reduce overall cost.

ADDITIONAL CONCLUSIONS AND RECOMMENDATIONS:

Those items which are not included in the detailed equipment/task analysis but are included in Table 3.5, also deserve attention. The following conclusions can be drawn about these items:

1. Three of four installations have the plastic molding kit, yet it is rarely used.

2. One installation has a large metal detector and another installation has a small hand held metal detector. They are both infrequently used.

3. Two installations had ultraviolet marking kits. Personnel were satisfied with them but they were infrequently used.

4. Evidence bags with secure seals were preferred to regular bags.

5. Two installations had gram scales which were infrequently used.

6. One installation had an identification kit for faces. Personnel were satisfied with it, the other three installations expressed an interest in obtaining one.

7. Personnel at several installations mentioned they could use body armor, credential cases, word processors, and a crime scene processing kit, and improved evidence safes.

8. One installation used a microfische projector and two other installations used tape recorders.

9. Finger print kits were used at all four installations and, in general, personnel were satisfied with them.

Based on these conclusions it is recommended that these items not be recommended for standardization, at least at this time. Not all installations which had specified items used them frequently and other installations did not express a need for such items. In general, there was no consensus of opinion or strong common viewpoint expressed in terms of obtaining a given item of equipment.

3.2.6 Traffic Equipment.

ITEM NAME: Radar-Stationary/Moving
ITEM CATEGORY: Traffic
ITEM TYPE: Commercial

EVALUATION CRITERIA:	Stationary	Moving
Improve Safety	2.93	3.22
Reduce Crime	4.09	4.55
Increase Effectiveness	4.38	4.81

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages
1. Permit traffic patrolman to detect a speeding vehicle from a moving or stationary position. (Using traditional or hand held radar.)
2. There is built in flexibility when either one or the other mode can be selected.

Disadvantages
1. Traditional radar equipment is bulky.
2. Can only detect speeder from one direction at a time.
3. Traditional radar may be effected by bad weather.
4. Stationary mode reduces flexibility.

PURPOSE/USE:

To detect vehicles that are traveling over the speed limit and to discourage passing vehicles from speeding.

TASKS:

1. Select mode: stationary or moving.
2. Calibrate/test for accuracy of equipment.
3. Detect speed of passing cars.
4. Identify speeder to issue traffic ticket.

USER REQUIREMENTS:

1. Easy to use.
2. Permit testing and calibration of equipment to ensure accurate reading.
3. Manageable to set up in car.
4. Holds up under varying weather conditions.
5. Easy to maintain.

ITEM NAME: Radar-Handheld
ITEM CATEGORY: Traffic
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   <u>3.18</u>
                      Reduce Crime   <u>4.33</u>
                      Increase Effectiveness <u>4.40</u>

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Permit traffic patrolman to detect a speeding vehicle
                    from a moving or stationary position.

                2. There is built in flexibility because the radar gun can
                    be pointed at a car in any direction.

                3. These guns are hand held.

                4. The guns are not bulky and are in one piece.

                5. Can detect speeder from both directions.

Disadvantages   1. Flexibility and effectiveness is reduced when only using
                    the stationary mode.

PURPOSE/USE:

To detect vehicles that are traveling beyond the speed limit and to dis-
courage passing vehicles from speeding.

TASKS:

1. Select stationary, or stationary/moving gun.

2. Calibrate/test for accuracy of equipment.

3. Detect speed of passing cars (from either direction).

4. If the moving mode is in use, the gun can be pointed at another moving
vehicle and the speed at which he is moving will be detected. (This radar
takes the MP's speed into account.)

5. Signal to speeder to pull over and issue a traffic ticket.

USER REQUIREMENTS:

1. Easy to use.

2. Permit testing and calibration of equipment to ensure accurate reading.

ITEM NAME: Radar-Handheld

3. Manageable to use in car.
4. Holds up under varying weather conditions.
5. Easy to maintain.

CONCLUSIONS AND RECOMMENDATIONS:

The purpose of using radar is to detect moving vehicles which are traveling over the posted speed limit. Basically, two types of commercial radar equipment is used; traditional and handheld, each of which can either be stationary or moving. Based on data summarized in the equipment/task analysis and Table 3.6, the following conclusions can be drawn:

1. Evaluation ratings for stationary, moving and handheld radar are high along two dimensions; reduce crime and increase effectiveness.

2. From an operational point of view, use of any type of radar equipment will permit an MP to detect speeding vehicles.

3. There is less flexibility in using stationary as compared to stationary/moving radar.

4. Handheld radar guns offer more flexibility than traditional units.

5. Handheld stationary/moving radar offers the most flexibility and mobility.

6. Handheld stationary/moving radar guns are easier to use than traditional radar units and are preferred over stationary handheld and traditional moving and stationary units.

7. A different combination of commercial radar units were in use at each installation. Personnel were satisfied with all types of equipment, especially the handheld radar.

8. Across all four installation, radar was frequently used.

9. In order to properly use each type of radar equipment, the MP must receive special instruction to perform required tasks.

Based on these conclusions and user requirements specified in the equipment/task/analysis, it is recommended that commercial radar equipment be standardized. The type of radar to be selected should meet as many of the user requirements as possible and yet be reasonably priced. From an operational point of view, any type of radar will detect speeding vehicles. Standardization of this equipment will facilitate training, increase MP effectiveness, and reduce overall cost.

Table 3.6 CHECKLIST OF TRAFFIC EQUIPMENT ACROSS FOUR SAMPLE INSTALLATIONS

ITEM OF EQUIPMENT	INSTALLATION 1			INSTALLATION 2			INSTALLATION 3			INSTALLATION 4		
	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS	IN USE	SATIS (-)(+)	PREFERENCE/ COMMENTS
1. 35mm CAMERA*	-	-	35mm CAMERA	-	-	35mm CAMERA	-	-	35mm CAMERA	-	-	35mm CAMERA
2. POLAROID (PORTABLE)*	✓	-	35mm CAMERA	✓	-	35mm CAMERA	✓	-	35mm CAMERA	✓	+	
3. MOVING RADAR	✓	+	PREFER SPEED-GUN MOVING/ STATIONARY	✓	+	PREFER SPEED-GUN MOVING/ STATIONARY	✓	+	PREFER SPEED-GUN MOVING/ STATIONARY	✓	+	PREFER SPEED-GUN MOVING/ STATIONARY
4. STATIONARY RADAR	✓	+	SAME AS ABOVE	✓	+	SAME AS ABOVE	✓	+	SAME AS ABOVE	✓	+	SAME AS ABOVE
5. HANDHELD RADAR	✓	++	SAME AS ABOVE	✓	++	SAME AS ABOVE	✓	++	SAME AS ABOVE	✓	++	SAME AS ABOVE
6. BREATHALIZER	✓	-	POTENTIALLY UN- RELIABLE AND INACCURATE	✓	+		✓			✓	+	
7. INTOXILIZER	-			-			✓	+		·		
8. ALCOHOLIZER	✓	+		✓			✓			-	+	
9. PATROL KIT	✓	-	NEEDS MORE INGREDIENTS	✓	-	NEEDS MORE INGREDIENTS	✓	-	NEEDS MORE INGREDIENTS	✓	-	NEEDS MORE INGREDIENTS
10. TRAFFIC CONES	✓	+		-	+		✓	+		✓	+	
11. TRAFFIC WANDS	✓	-	BUY OWN-COMM.	✓	++		✓	++		✓	+ -	WOULD ALSO LIKE GREEN FILTER
12. BARRICADES	✓	+	(MAKE OWN)	✓	+		✓	+		✓	-	
13. WHEEL IMMOBILIZER	-	+	(NOT USED MUCH)	-	+		✓	+		-	+	NOT STURDY ENOUGH

* THIS ITEM IS DISCUSSED IN THE EQUIPMENT/TASK ANALYSIS FOR MPI.

3-101

ITEM NAME: Breathalizer (900A)
ITEM CATEGORY: Traffic
ITEM TYPE: Commercial
EVALUATION CRITERIA: Improve Safety   3.03
                    Reduce Crime   4.0
                    Increase Effectiveness 4.61

GENERAL OPERATIONAL CHARACTERICS OF EQUIPMENT:

Advantages   1. Permits investigator to obtain evidence in order to
                  verify that a suspect is intoxicated.

               2. Suspect blows into tube attached to machine so that it
                  may determine the alcohol level.

Disadvantages 1. There is a long delay before the machine warms up.

               2. There is heavy reliance on manual adjustment. The balance
                  meter must be adjusted manually before and after the
                  suspect gives a breath sample.

               3. There is more room for error if the meter is manually
                  adjusted.

PURPOSE/USE:

To determine if in fact, a suspect has been drinking so heavily that he can
be legally defined as drunk and immediately removed from driving on the road.

TASKS:

1. Hopefully, if a person has been pulled over by a Traffic Patrolman and is
suspected of drinking heavily, the MP will notify the traffic section in the
station. This is the signal to warm up the breathalizer machine.

2. Once the machine is warmed up, the MP manually balances the meter.

3. The suspect blows into a tube attached to the machine until a light
turns on.

4. The MP manually balances the meter again to obtain a reading concerning
the alcohol level of the suspect.

5. The reading will indicate whether or not the suspect is legally intoxicated.

6. If the suspect is legally intoxicated, he is issued a ticket and is not
permitted to drive.

ITEM NAME: Breathalizer (900A)

USER REQUIREMENTS:

1. Easy to use.
2. Enables user to obtain accurate readings.
3. Easy interpretation of results.
4. Short delay time before testing begins.

ITEM NAME: Intoxilizer (Model 4011A)

ITEM CATEGORY: Traffic

ITEM TYPE: Commercial

EVALUATION CRITERIA: Improve Safety   3.18

                     Reduce Crime   3.81

                     Increase Effectiveness 4.33

GENERAL OPERATIONAL CHARACTERISTICS OF EQUIPMENT:

Advantages   1. Permits investigators to obtain evidence in order to
                    verify that a suspect is intoxicated.

                2. The recording and testing process is highly auto-
                    mated. Therefore, the calibration and reading may be
                    more accurate and less susceptible to human error.

                3. The results of the test are outputted on a computer card
                    that is inserted into the machine. Both a baseline
                    measure (0) and actual intoxication level is shown on
                    the card.

Disadvantages 1. High cost.

               2. Slight warm up time.

PURPOSE/USE:

To determine if in fact a suspect has been drinking so heavily that he can
be legally defined as drunk and immediately removed from driving on the road.

TASKS:

1. After warming the machine and waiting for the ready light to come on,
the MP inserts the test record card into the machine.

2. He connects the breath tube to the pump tube.

3. He turns the mode selector switch to zero set. He adjusts set knob so
that display/reads .000, .001, .002, or .003.

4. He turns the mode selector switch to air blank.

5. After the air blank cycle is completed, he turns the mode selection
switch to zero reset. He readjusts zero set knob to obtain proper zero.

6. He then turns the mode selector switch to the breath tube, disconnects
the breath tube from the pump tube, places the mouthpiece on the breath
tube, and has the subject blow into the breath tube until the sample is
complete.

ITEM NAME: Intoxilizer (Model 4011A)

7. Lastly, he connects the breath tube to the pump tube and turns mode selection switch to air blank.

8. He checks each step on a checklist as he sequentially performs the steps detailed above.

USER REQUIREMENTS:

1. Easy to use.

2. Accurate calibration and testing.

3. Easy interpretation of results.

4. Short delay and testing time.

CONCLUSIONS AND RECOMMENDATIONS

The purpose of a breathalizer and an intoxilizer is to determine the level of alcohol content in a person's body in a systematic/scientific manner. Both items are currently in use. Based on data summarized in the equipment/task analysis and Table 3.6, the following conclusions can be drawn.

1. Evaluation ratings along all three dimensions for the breathalizer are approximately the same as those for the intoxilizer.

2. Evaluation ratings are fairly high along two dimensions; reduce crime and increase effectiveness.

3. From an operational point of view, both items function in a simialr manner but the intoxilizer ensures and provides more accurate readings than the breathalizer.

4. In order to properly use either item of equipment, the MP must receive special instructions to perform the required tasks.

5. The breathalizer was in use at three of four installations. It was used frequently and personnel at two of the three installations were satisfied with its use.

6. The intoxilizer was in use at one of the four installations. It was used frequently and personnel were extremely satisfied with its use.

7. The cost of an intoxilizer is approximately three times that of a breathalizer.

Based on these conclusions and user requirements specified in the equipment/ task analysis, it is recommended that a breath detector item be standardized. Although the intoxilizer meets all the user requirements, it is very costly.

ITEM NAME: Intoxilizer (Model 4011A)

The most suitable commercial (in terms of cost and user requirements) breath detector item needs to be identified. Once such an item is selected, standardization will facilitate training, and help to reduce crime, increase MP effectiveness, and reduce, in the long run, overall costs.

ADDITIONAL CONCLUSIONS AND RECOMMENDATIONS:

Those items which are not included in the detailed equipment/task analysis but are included in Table 3.6, also deserve attention. The following conclusions can be drawn about these items:

1. The commercial alcoholizer test item was used only at one installation. It is used in the field as a screening device to test an individual's alcohol level before the individual is transported to the station to take an official breath detection test (breathalizer, intoxilizer).

2. Across all four installations, patrol kits were assembled for use by both traffic investigators and patrols. General consensus of opinion was that more items were needed to complete the patrol kits and these items should be in every kit. Some sample items are:

- Flares
- Fire extinguisher
- Measuring stick
- Chalk
- Blankets
- 1st Aid kits
- Tow chain

3. Traffic wands (military issue), traffic cones (commercial), and barricades (commercial) were used frequently at most installations. In general, most personnel were satisfied with their use. Personnel experienced a desire to have more traffic cones, sturdier barricades and improved traffic wands.

4. Wheel immobilizers (boot) were infrequently used at one installation. Personnel at the other three installations did not express a desire or need for such an item.

Based on these conclusions, the following recommedations are:

1. The most appropriate type of traffic cones and barricades should be identified and standardized.

2. Further consideration should be given to the items to be included in a patrol kit. Once the most appropriate items are identified, the patrol kit should be standardized.

ADDITIONAL CONCLUSIONS AND RECOMMENDATIONS:

3. The military issue traffic wands should remain the standard item. (However, since they are only satisfactory, further consideration should be given to the possibility of improving the quality of the wands, changing the standard, and standardizing improved traffic wands.)

4. There does not appear to be a need to obtain or standardize alcoholizer tests and wheel immobilizers.

3.3   Summary of Items of Equipment Recommended for Standardization.

        As a result of performing the equipment/task analysis and inter-
preting the results the following items are suggested as "candidates" for
standardization:

    1. Portable walkie talkie radio
    2. Mobile radio units compatible with walkie talkie
    3. Communications console
    4. Recorder (in station)
    5. Teletype terminal
    6. TV monitors
    7. Holster to carry 45 pistol
    8. Nightstick slip ring
    9. Belt
    10. Flashlight
    11. Jacket
    12. Headgear
    13. Vehicles
    14. Spotlight on vehicle
    15. Emergency lights, sirens, and P.A. system
    16. Divider between front and back seat
    17. 35mm camera
    18. Drug field test kit
    19. Concealment holster
    20. Latent fingerprint kit
    21. Radar units
    22. Breath Detector
    23. Traffic cones
    24. Barricades
    25. Patrol kit.

REFERENCES

Military Police Operations, FM 19-10. Headquarters, Department of the Army, Washington D.C., 30 September 1976.

Military Police Traffic Operations, FM 19-25. Headquarters, Department of the Army, Washington D.C., 30 September 1977.

INDEX OF EQUIPMENT ITEMS

APPENDICES

A - STRUCTURED OBSERVATION INTERVIEW SCHEDULE

B - RATING SCALE FOR EVALUATION OF COMMERCIAL
    ITEMS OF LAW ENFORCEMENT EQUIPMENT

C - MEAN RATINGS OF SELECTED ITEMS OF LAW
    ENFORCEMENT EQUIPMENT ALONG THREE DIMENSIONS

APPENDIX A

STRUCTURED

OBSERVATION - INTERVIEW

SCHEDULE

Prepared for CINDI - LEE
Research Team

To be used when interviewing
Army MP personnel

OBJECTIVES

1. Determine unit organization.

2. Identify appropriate personnel to interview.

3. Identify standard and commercial equipment items.

4. Conduct structured interviews with MP's to obtain relevant data on both standard and commercial items of equipment.

5. Collect data in such a way as to permit Task Analysis. Data collected on each item of equipment will be analyzed to determine extent of correspondence between operational characteristics of equipment and functional requirements for using equipment.

6. Obtain documentation to support and complement information obtained during interview.

       a.   manufacturer's name, cost, and specifications
       b.   army's standard name, cost, and specifications
       c.   mission, function, tasks, sop

TENTATIVE TASK ANALYSIS APPROACH

Item of Equipment/Generic   Ex: Radio

Define Functional Requirements

Task - communicate with other patrolman

Subtask 1 call for assistance

Subtask 2 assist in surveillance activities

Subtask 3 provide general information

Compare Requirements to Specifications

Commercial Equipment Items

Operational Specifications

Compare

Present

Absent

Standard Equipment Items

Operational Specifications

Compare

Absent

Present

TASK ANALYSIS: STEPS

1. Identify Equipment in use (standard and commercial).

2. Determine Operational characteristics of equipment.

3. Identify tasks associated with use of equipment.

4. Determine functional requirements of equipment usage.

5. Perform comparison studies.

        a. standard equipment items
        b. commercial equipment items
        c. standard vs. commercial items
     *d. functional requirements vs operational
          specifications

Method: a. conduct structured observation - interviews
           b. review relevant documentation

STRUCTURED INTERVIEW APPROACH

1. Interviewer <u>structures</u> the interview.

2. Interviewer is aware of objectives and asks questions which will provide the desired information.

3. Interviewer asks questions in a systematic manner.

4. For CINDI - LEE projects, for each item of equipment, a series of questions will be asked. After all necessary and desired information is collected for the item, the interview will identify a new item of equipment and ask a series of questions for that item, etc.

5. A list of suggested questions with associated objectives is provided as a guide. The interviewee must be allowed to respond to these questions. If information is not easily being obtained, the interviewer will ask leading questions (prompts, rephrased) to elicit the desired response.

6. The interviewer must record relevant information (pertaining to objectives) obtained during the interview.

PROCEDURE/INSTRUCTIONS

Preparation

1. Determine Organization of units.

2. Identify appropriate personnel to interview.

3. Request inventor list of standard and commercial equipment.

Interview

4. Present purpose of visit and interview.

5. If possible, conduct interview in presence of equipment to permit easy explanation and demonstration of use of equipment (as well as specific name/identity).

6. During interview, refer to relevant items on checklist (use as a guide).

7. For each equipment item, obtain desired information, ask series of suggested questions, and record answers on equipment item page.

8. Identify additional items of equipment not covered on checklists.

9. Add to checklist, and ask series of questions for each new item of equipment.

Documentation

10. Obtain documentation on standard and commercial equipment.

        a. appropriate TO + E Table #, etc.
        b. which standard items are not being used
        c. standard item/cost and specific names
        d. commercial item/cost, manufacturer, name of item, specifications
        e. mission/function/task/SOP data

AREAS OF EQUIPMENT TO STUDY

STANDARD AND COMMERCIAL	POSSIBLE INFO SOURCE
1. Personal gear	Patrolman, etc.
2. Investigative	MPI
3. Security	Physical security, K-9
4. Traffic control	Traffic
5. Confinement	Patrol Desk/Station or other facilities
6. Vehicles	Patrolman, etc.
7. Communication	Patrolman, etc. Patrol Desk/Station
8. Weapons	Patrolman, etc.
9. Civil Disturbance	Patrolman, etc.
10. Station Equipment	Patrol Desk/Station
11. Wildlife Management (game warden)	Game Warden, K-9
12. Laboratory	

UNIT ORGANIZATION
by function

Record unit organization

      Ex: CO, branches, functions

      EX: branches: MPI, physical security, traffic,
             Desk/Patrol etc.

PERSONNEL TO INTERVIEW

Identify appropriate individuals who can provide desired information about equipment.

         Ex: 1. CO commander - overview
               2. Capt operations - overview
               3. 1st Seargent CO - overview
               4. Master Seargents of Branches
               5. (individual in supply)

EQUIPMENT LIST

Note: As you identify additional items of equipment not on this list, please add them to the list.

STANDARD	COMMERCIAL
Personal Gear	**Personal Gear**
Armor Vest	Armor Vest (buy own)
Belt	Belt
Amunition Pouch on belt	Amunition Pouch on belt
Handirons on belt	Handirons on belt
Carry case for handirons on belt	
Holster on belt	Holster on belt left handed holster
Uniforms	(white hat for women) Crash riot helmets
Badge	
Night stick holder on belt	Night stick holder on belt
First aid carrier attached to belt	
	Page Bell boy
	Walkie/Talkie Radio

EQUIPMENT LIST

STANDARD   ## COMMERCIAL

Weapons   ### Weapons

Night stick on belt

Revolver Cal 38 2in, 4in

Pistol Aut, Cal 45

Shotgun 12 guage

Rifle 5.56, recoilers

Machine gun

Bayonet Knife with scabbard
for M16A1 Rifle

EQUIPMENT LIST

STANDARD	COMMERCIAL
Vehicle	Vehicle
	Patrol
	Traffic
	K-9 /modified screen/
	Covert /unmarked/
	One way mirror
Light warning vehicle w/blinker device	Kojak light
Spotlight electric lamp 9V w/para bol	Spotlight
Siren electric motor operated DC 24	Siren +
Public address system	PA system
	Patrol kit in trunk
Foot locker	Foot locker, rope
First aid kit	First aid kit
Fire extinguisher	Fire extinguisher
	Meas stick
	Chalk
	Tow chain
	Ax
	Pry bar
	etc.
	Radio/mobile/stationary and Walkie talkie

Light Set-General illumination Visibar-lights

EQUIPMENT LIST

STANDARD	COMMERCIAL
<u>Investigative</u>	<u>Investigative</u>
Finger print kit	Finger print kit
Finger print tape	Finger print pads
Camera still picture KE-40, KS-19	35mm camera Nikon F2 lense 200m - 600m zoom lense polaroid attachment
Binoculars	
	Gram scale
	Ultraviolet marking kit
	Telephone message device
	Polaroid camera
	Field test kit for drugs
Night vision goggles (rent)	
Make shift finger print table	Finger print table (need)
Make shift evidence bags	Need evidence bags (do not have)
	Holster pocket book type (buy own)
	Holster - belt concealment (buy own)
	Holster - pullaway shoulder (buy own)
	Metal detector
	Molding kit for footprints
	Identification kit for faces
Night vision sight crew served weapons	

EQUIPMENT LIST

STANDARD	COMMERCIAL
Traffic Control	**Traffic Control**

	COMMERCIAL
	Polaroid camera
	Wheel immobilizer (boot)
	Alcoholizer, field test for alcohol
	Traffic cones
	Saw horse type barricades
Traffic wands	Traffic wands
	Radar/stationary
	Radar/gun
	Breathalizer
Sketching set surveying	

EQUIPMENT LIST

STANDARD

COMMERCIAL

Communication

Communication

Radio Set 3 types

Radio
Station
Vehicle
Individual

Radio control group

Radio receiver set

Transmitter set radio

Test set radio

Antenna

Telephone set

Intercommunication set

Headset microphone

Dictaphone recorder 4000

Communication and Command
Console - Motorola

Phone call/radio

Tracking system

TV monitor

Random access slide projector

Teletype TC241 Telex

Communication

Cable telephone

**Public address system
2 types**

Speech security equipment

EQUIPMENT LIST

STANDARD	COMMERCIAL
<u>Station Equipment</u>	<u>Station Equipment</u>

Dictaphone recorder 4000

Train - video cassettes
       - TV monitor
       - sight & sound cassettes
       - slide projector

Alarms
(Communication and Command
console)

Teletype

EQUIPMENT LIST

STANDARD	COMMERCIAL
Civil Disturbance	**Civil Disturbance**
Body armor	Body armor
	Crash helmets
Disperser riot control agent, portable	
12 gauge shotgun	
Mask (Field, Tank)	
Alarm chemical agent automatic port, F/truck	
Service kit portable flame thrower; riot control agent disperser	
Service kit portable riot control agent disperser	

EQUIPMENT LIST

STANDARD   COMMERCIAL

Security   Security

Speech security equipment

K-9 group

EQUIPMENT LIST

STANDARD   ## COMMERCIAL

Confinement   ### Confinement

EQUIPMENT LIST

STANDARD   COMMERCIAL

<u>Wildlife Management</u>   <u>Wildlife Management</u>

                                 Snare for animals

                                 Traps for animals

K-9 set-up   K-9 set-up

Carrying cages

Training clothes

EQUIPMENT LIST

STANDARD

<u>Laboratory</u>

COMMERCIAL

<u>Laboratory</u>

QUESTIONS TO BE ASKED FOR
EACH ITEM OF EQUIPMENT

Purpose: Determine how well the equipment you now have available to use (commercial and standard) suits/meets your needs.

Technique: Inform interviewee that you will systematically cover each item of equipment, etc., "one item at a time".

Note: For each question, follow-up with leading questions to achieve desired response (if necessary).

IDENTIFICATION OF EQUIPMENT

1. Do you use _____ item of equipment? (from checklist)

1A. What other items of equipment do you use? (if not from checklist)

2. Tell me about the equipment.

> standard?
> commercial?
> cost?
> specific name?
> Manufacturer?

3. Obtain information for "Check One" now or <u>later</u> in the interview?

TASK, FUNCTIONAL REQUIREMENTS,
OPERATIONAL CHARACTERISTICS

4. How do you use the item?

5. When do you use it?

6. Why do you use it?

7. How frequently do you use it?

8. Do others use it? Who?

MATCH FUNCTIONAL REQUIREMENTS
TO OPERATIONAL CHARACTERISTICS

9. In using it, does it do what you want it to do? Why?

10. Does it do more?

11. Does it do less?

Subjective Evaluation Criteria

12. Is it safe to use? Yes/No How safe? Scale 1 - 10

13. Is it helpful in reducing crime? Yes/No How helpful?
Scale 1 - 10

14. Is it effective? Yes/No, Why? How effective? Scale 1 - 10

BETTER MATCH OF EQUIPMENT
TO REQUIREMENTS

15. Are there problems in using it? Why?

16. Is there something else you'd rather use? Why?

17. Do you use it instead?

18. "Check One" if not already checked.

SUPPORTING DOCUMENTATION

19. Do you have any material that describes the equipment?

20. Do you know who might have the material?

ADDITIONAL EQUIPMENT

21. Can you think of any other item of equipment that you
need but do not have?

EQUIPMENT ITEM

NAME:
SPECIFIC NAME:
STANDARD:
COMMERCIAL:
COST:

Commercial vs Standard/Check one

        / /   commercial item in use because standard
             not provided

        / /   commercial item in use although standard
             is provided

        / /   standard item in use although inadequate

        / /   standard item provided and is satisfactory

        / /   another commercial item would be better

        / /   other

Subjective Evaluation Criteria

		Check one		Use scale from	
		YES	NO	1 - 10	
1.	Is it safe to use?	/ /	/ /	How safe?	____
2.	Is it helpful in reducing crime?	/ /	/ /	How helpful?	____
3.	Is it effective (overall)?	/ /	/ /	How effective?	____
4.	Do you use it frequently?	/ /	/ /	How frequently?	____

Comments/Notes:

APPENDIX B

RATING SCALE FOR EVALUATION

OF COMMERCIAL ITEMS OF

LAW ENFORCEMENT EQUIPMENT

April 17, 1979

Prepared by: Science
Applications, Inc.

Administration Schedule: 1 hour
Verbal and Written Instructions: 10 minutes
Complete Rating Scales: 45 minutes
(Approximately 1 item per minute)
Biographical Sketch: 5 minutes

INSTRUCTIONS

The purpose of the administration of this rating scale is to evaluate, in a subjective manner, the value of selected items of commercial law enforcement equipment. Items will be evaluated by you along the following three dimensions:

1. improvement in MP safety rates
2. anticipated reduction in crime rates
3. increase in MP effectiveness.

You will use the rating scales provided to evaluate each item of equipment. Described below are definitions of the three dimensions and the rating scale.

Dimensions

1. Improvement in MP Safety Rates.

You will be asked to evaluate whether using a particular item of equipment has any impact on MP safety rates. As you rate each item of equipment, along this dimension, you should ask youself the following questions:

● Is it safe for me to use this item of equipment as I perform my job?

● Is the item designed with built in safety features?

● Does the use of this item tend to reduce the frequency of accidents in which MP's may injure themselves or others?

As you rate each item, you will be asked to determine whether you agree or disagree with the extent to which an item improves MP safety.

2. Anticipated Reduction in Crime Rate.

You will be asked to evaluate whether using a parti-
cular item of equipment has any impact on the reduction in
crime rate. As you rate each item of equipment along this
dimension, you should ask yourself the following questions:

- Does the use of this item help to prevent crimes
  from occurring?

- Does the use of this item help to deter crimes
  from occurring?

- Does the use of this item tend to reduce the
  intensity and frequency of criminal activities?

As you rate each item, you will be asked to determine whether
you agree or disagree with the extent to which an item helps
to reduce crime rate.

3. Increase in MP Effectiveness.

You will be asked to evaluate whether using a parti-
cular item of equipment has any impact on increase in MP
effectiveness. As you rate each item of equipment along this
dimension, you should ask yourself the following questions:

- Does use of the item enable you to successfully
  perform your job?

- Does use of the item improve your job performance?

- Is the item designed to meet the requirements
  of the job?

As you rate each item, you will be asked to determine whether
you agree or disagree with the extent to which an item in-
creases MP effectiveness.

Rating Scale

For each of the 49 items of equipment you will be asked to make a subjective judgment along each of the three dimensions described above. Three statements about each item will be presented, each of which will be followed by a five point rating scale. You will be required to circle a number on each scale which corresponds to your rating of the item. Use of the rating scale is described below.

Example:

Circle the number that corresponds to the extent to which you agree/disagree with the statement.

The use of this item of equipment, holster (n std) _____
_____ would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
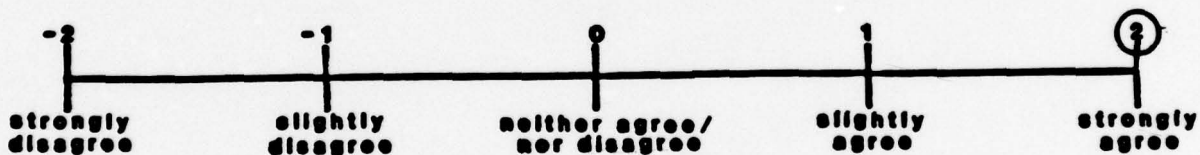
Ratings:

2 = strongly agree with the statement

1 = slightly agree with the statement

0 = neither agree/nor disagree with the statement, cannot decide, has no relevance

-1 = slightly disagree with the statement

-2 = strongly disagree with the statement

As you rate each item, be sure to assign and circle the appropriate ratings for every item and along each dimension. Do not spend too much time on any one item; first impressions are important.

The remaining sections of this booklet contain a list of items of equipment under evaluation, the rating scales for each item, and a form to provide information on MP experience and to rank order the importance of the three dimensions.

If there are any questions, be sure to ask the researcher.

EQUIPMENT LIST

1. Communications and Command Console with patching and tracking capability

2. Recorder in station

3. Teletype Terminals/Information System

4. TV monitors in station

5. Portable Walkie/Talkie Radios

6. 45 Pistol

7. 38 Revolver, 2 inch

8. 38 Revolver, 4 inch

9. 357 Magnum

10. Rifle

11. Nightstick (std)

12. Holster (std)

13. Holster (nonstd)

14. Concealment Holsters

15. Nighstick Holder (std)

16. Nightstick Ring Holder

17. Leather Belt (std)

18. Webb Belt

19. Flashlight (std)

20. Flashlight (nonstd)

21. Uniform - Fatique

22. Uniform - Class A

23. Field Jacket

24. Flight Jacket

25. Steel Pot

26. Fatique Cap

27. Beret

28. Helmet Liner

29. White Hat

30. Helicopters

31. Vehicles - Sedan

32. Vehicles - Compact

33. Emergency Lights, Siren and P.A. System on vehicle

34. Divider between front and back seat of vehicle

35. Kojack Light for vehicle

36. Spotlight on vehicle

37. Stationary Car Radio in vehicle

38. Binoculars

39. Night Vision Devices

40. Polaroid Camera

41. 35mm Camera

42. Latent Finger Print Field Kit (std)

43. Latent Finger Print Field Kit (nonstd)

44. Drug Field Test Kit

45. Intoxilizer

46. Breathalizer

47. Radar - Stationary

48. Radar - Moving

49. Radar - Speed Gun

1.   a.   The use of this item of equipment, _Comm. & Command Console_
          w/patching & tracking capability would improve MP safety.
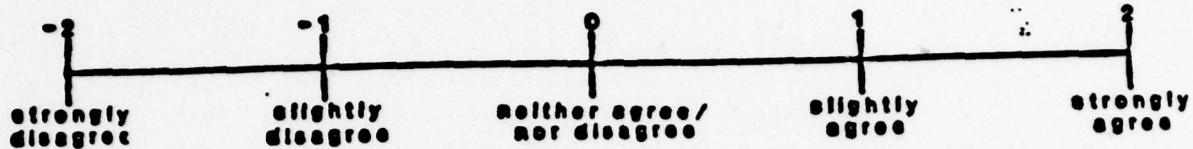
```
     -2            -1             0             1             2
     |_____|_____|_____|_____|
   strongly      slightly     neither agree/    slightly     strongly
   disagree      disagree      nor disagree       agree        agree
```

     b.   The use of this item of equipment, _Comm. & Command Console_
          w/patching & tracking capability would help to reduce crime.
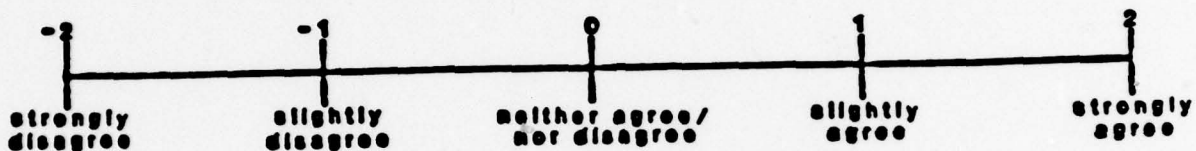
```
     -2            -1             0             1             2
     |_____|_____|_____|_____|
   strongly      slightly     neither agree/    slightly     strongly
   disagree      disagree      nor disagree       agree        agree
```

     c.   The use of this item of equipment, _Comm. & Command Console_
          w/patching & tracking capability would increase MP effectiveness.
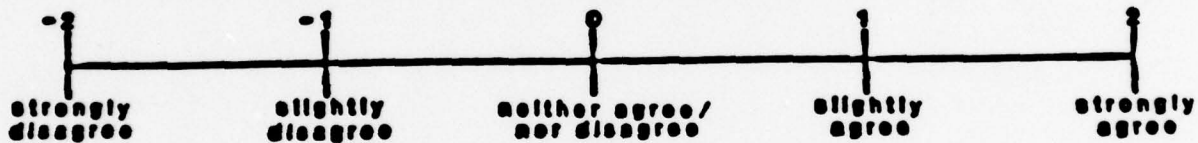
```
     -2            -1             0             1             2
     |_____|_____|_____|_____|
   strongly      slightly     neither agree/    slightly     strongly
   disagree      disagree      nor disagree       agree        agree
```

2.   a.   The use of this item of equipment, _Recorder in station_
          _____ would improve MP safety.

```
     -2            -1             0             1             2
     |_____|_____|_____|_____|
   strongly      slightly     neither agree/    slightly     strongly
   disagree      disagree      nor disagree       agree        agree
```

     b.   The use of this item of equipment, _Recorder in station_
          _____ would help to reduce crime.

```
     -2            -1             0             1             2
     |_____|_____|_____|_____|
   strongly      slightly     neither agree/    slightly     strongly
   disagree      disagree      nor disagree       agree        agree
```

     c.   The use of this item of equipment, _Recorder in station_
          _____ would increase MP effectiveness

```
     -2            -1             0             1             2
     |_____|_____|_____|_____|
   strongly      slightly     neither agree/    slightly     strongly
   disagree      disagree      nor disagree       agree        agree
```
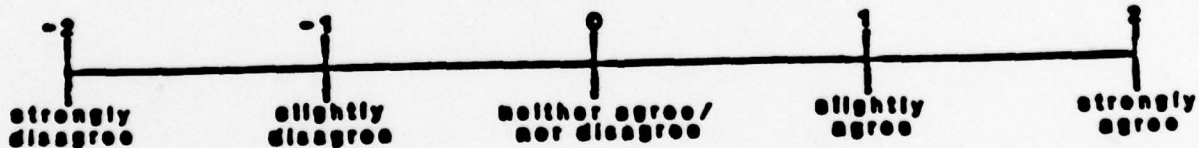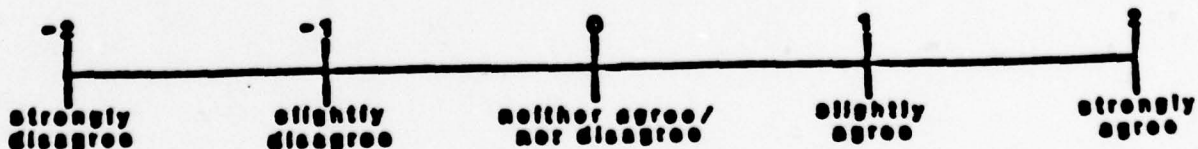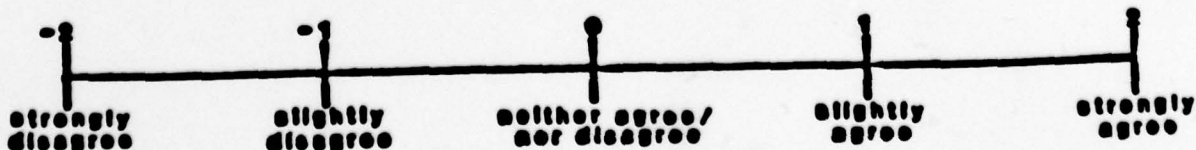
3. a. The use of this item of equipment, Teletype Terminals/
        Information System would improve MP safety.

```
   -2            -1            0             1             2
    |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly      strongly
disagree      disagree     nor disagree      agree         agree
```
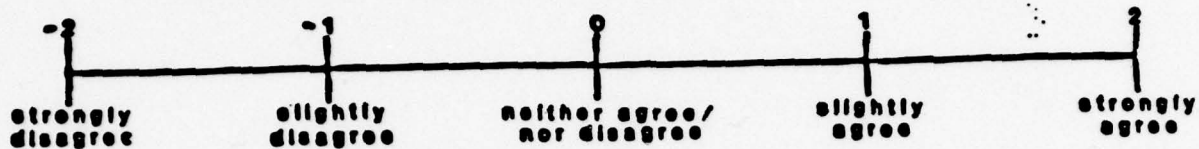
    b. The use of this item of equipment, Teletype Terminals/
        Information System would help to reduce crime.

```
   -2            -1            0             1             2
    |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly      strongly
disagree      disagree     nor disagree      agree         agree
```
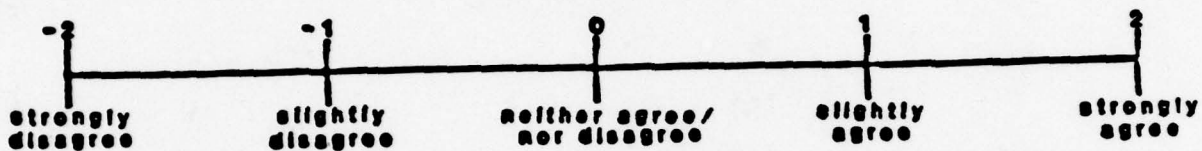
    c. The use of this item of equipment, Teletype Terminals/
        Information System would increase MP effectiveness.
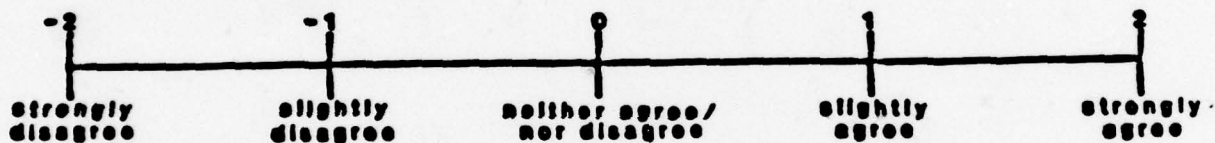
```
   -2            -1            0             1             2
    |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly      strongly
disagree      disagree     nor disagree      agree         agree
```

4. a. The use of this item of equipment, TV monitors in
        station would improve MP safety.

```
   -2            -1            0             1             2
    |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly      strongly
disagree      disagree     nor disagree      agree         agree
```

    b. The use of this item of equipment, TV monitors in
        station would help to reduce crime.

```
   -2            -1            0             1             2
    |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly      strongly
disagree      disagree     nor disagree      agree         agree
```

    c. The use of this item of equipment, TV monitors in
        station would increase MP effectiveness.

```
   -2            -1            0             1             2
    |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly      strongly
disagree      disagree     nor disagree      agree         agree
```
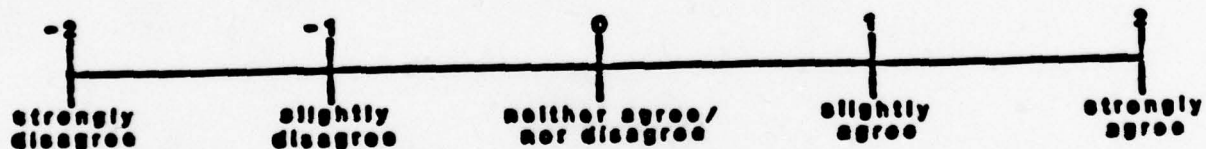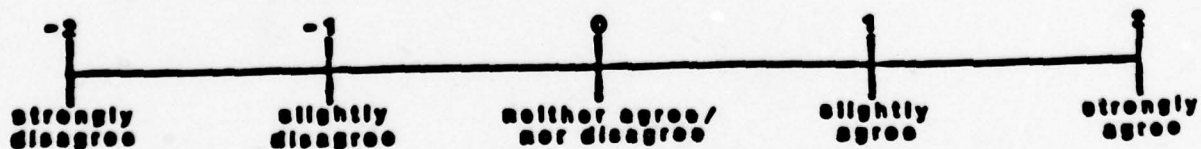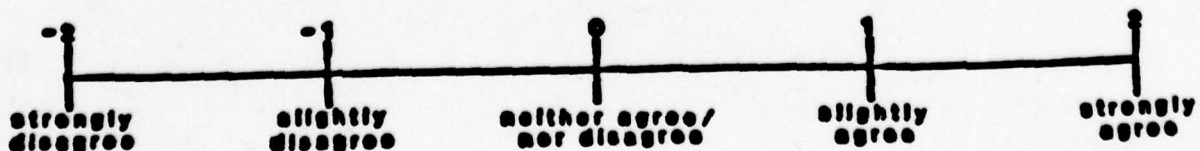
5. a. The use of this item of equipment, <u>Portable Walkie/Talkie</u> <u>Radio</u> would improve MP safety.

```
 -2          -1           0           1           2
  |_____|_____|_____|_____|
strongly    slightly   neither agree/   slightly   strongly
disagree    disagree    nor disagree      agree      agree
```
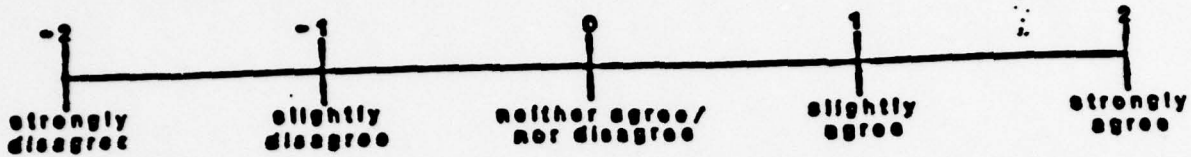
   b. The use of this item of equipment, <u>Portable Walkie/Talkie</u> <u>Radio</u> would help to reduce crime.

```
 -2          -1           0           1           2
  |_____|_____|_____|_____|
strongly    slightly   neither agree/   slightly   strongly
disagree    disagree    nor disagree      agree      agree
```
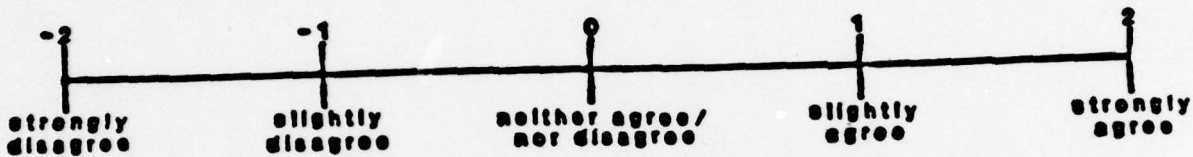
   c. The use of this item of equipment, <u>Portable Walkie/Talkie</u> <u>Radio</u> would increase MP effectiveness.

```
 -2          -1           0           1           2
  |_____|_____|_____|_____|
strongly    slightly   neither agree/   slightly   strongly
disagree    disagree    nor disagree      agree      agree
```
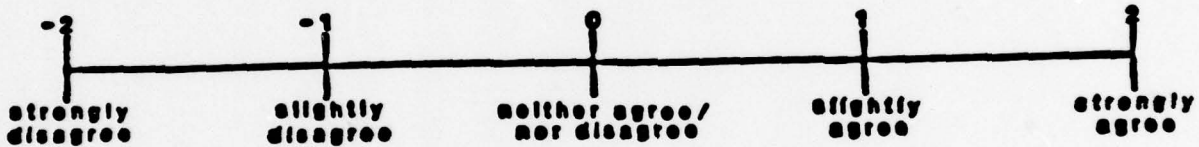
6. a. The use of this item of equipment, <u>45 Pistol</u> would improve MP safety.

```
 -2          -1           0           1           2
  |_____|_____|_____|_____|
strongly    slightly   neither agree/   slightly   strongly
disagree    disagree    nor disagree      agree      agree
```
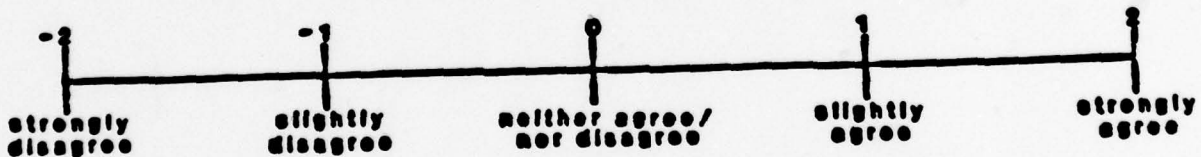
   b. The use of this item of equipment, <u>45 Pistol</u> would help to reduce crime.

```
 -2          -1           0           1           2
  |_____|_____|_____|_____|
strongly    slightly   neither agree/   slightly   strongly
disagree    disagree    nor disagree      agree      agree
```
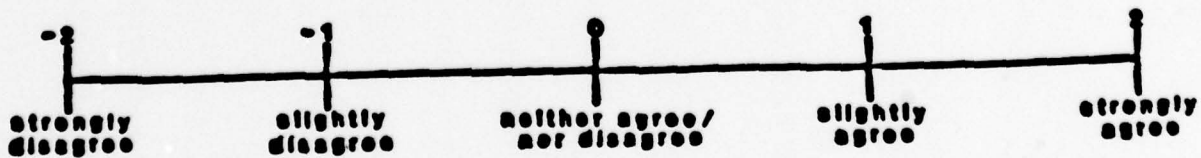
   c. The use of this item of equipment, <u>45 Pistol</u> would increase MP effectiveness.
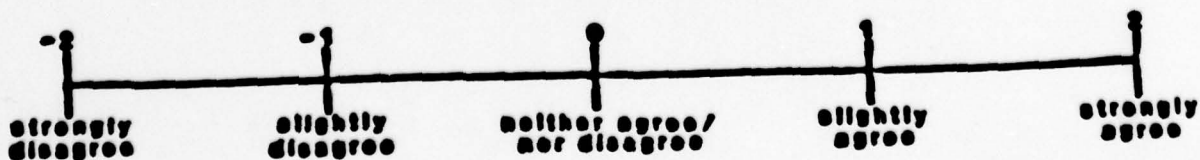
```
 -2          -1           0           1           2
  |_____|_____|_____|_____|
strongly    slightly   neither agree/   slightly   strongly
disagree    disagree    nor disagree      agree      agree
```

7.　a.　The use of this item of equipment, 38 Revolver, 2 inch
_____ would improve MP safety.

```
 -2            -1             0              1              2
  |_____|_____|_____|_____|
strongly      slightly    neither agree/     slightly      strongly
disagree      disagree     nor disagree        agree         agree
```
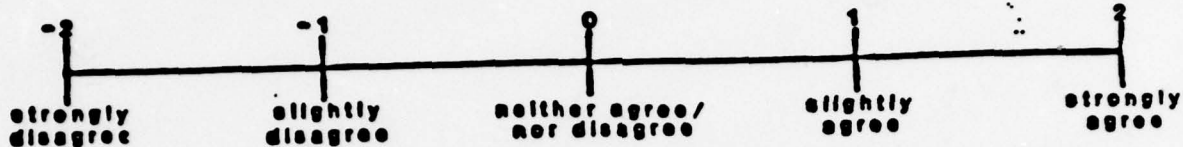
　　b.　The use of this item of equipment, 38 Revolver, 2 inch
_____ would help to reduce crime.
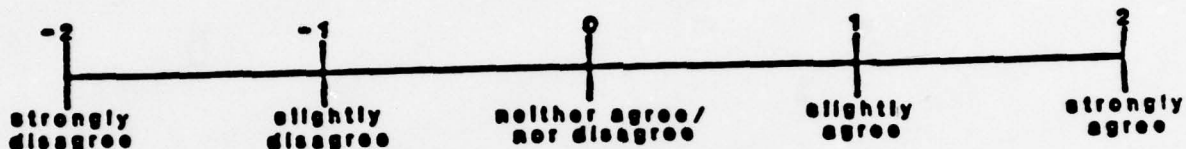
```
 -2            -1             0              1              2
  |_____|_____|_____|_____|
strongly      slightly    neither agree/     slightly      strongly
disagree      disagree     nor disagree        agree         agree
```

　　c.　The use of this item of equipment, 38 Revolver, 2 inch
_____ would increase MP effectiveness.

```
 -2            -1             0              1              2
  |_____|_____|_____|_____|
strongly      slightly    neither agree/     slightly      strongly
disagree      disagree     nor disagree        agree         agree
```

8.　a.　The use of this item of equipment, 38 Revolver, 4 inch
_____ would improve MP safety.

```
 -2            -1             0              1              2
  |_____|_____|_____|_____|
strongly      slightly    neither agree/     slightly      strongly
disagree      disagree     nor disagree        agree         agree
```
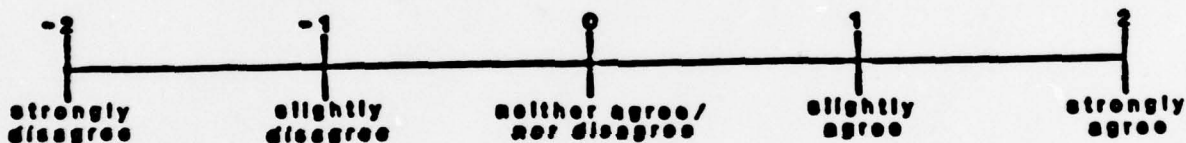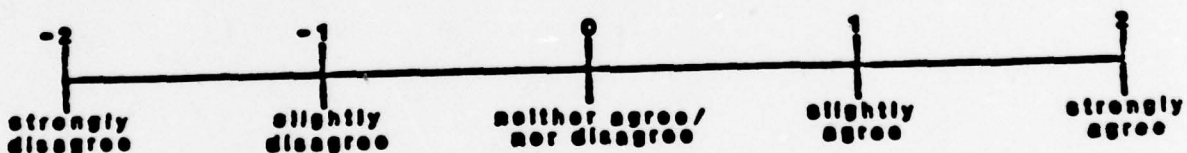
　　b.　The use of this item of equipment, 38 Revolver, 4 inch
_____ would help to reduce crime.
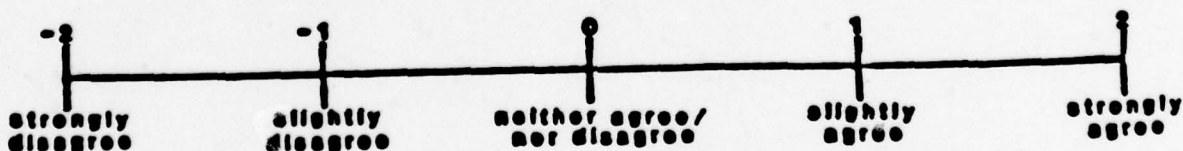
```
 -2            -1             0              1              2
  |_____|_____|_____|_____|
strongly      slightly    neither agree/     slightly      strongly
disagree      disagree     nor disagree        agree         agree
```

　　c.　The use of this item of equipment, 38 Revolver, 4 inch
_____ would increase MP effectiveness.

```
 -2            -1             0              1              2
  |_____|_____|_____|_____|
strongly      slightly    neither agree/     slightly      strongly
disagree      disagree     nor disagree        agree         agree
```
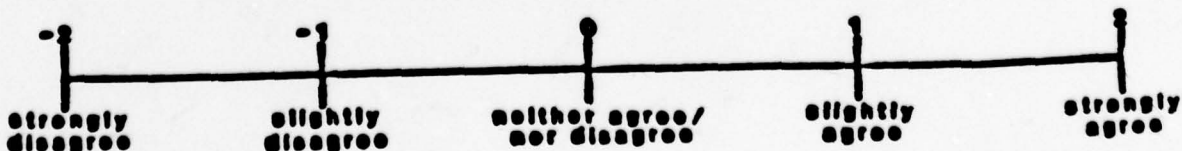
9.   a.   The use of this item of equipment, 357 Magnum
_____would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
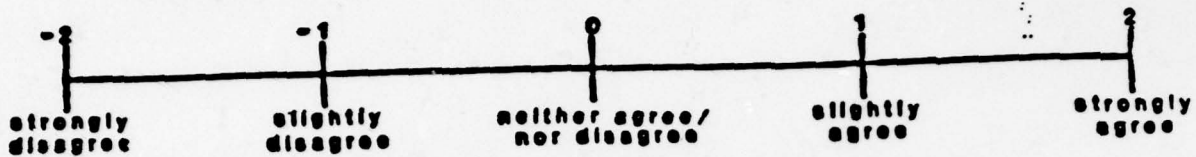
b.   The use of this item of equipment, 357 Magnum
_____would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
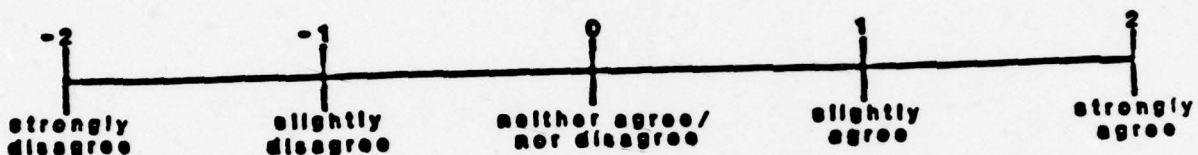
c.   The use of this item of equipment, 357 Magnum
_____would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
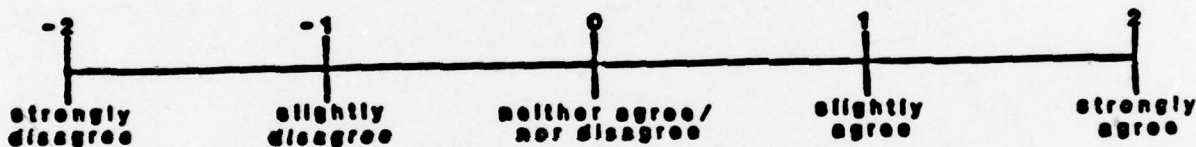
10.   a.   The use of this item of equipment, Rifle
_____would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
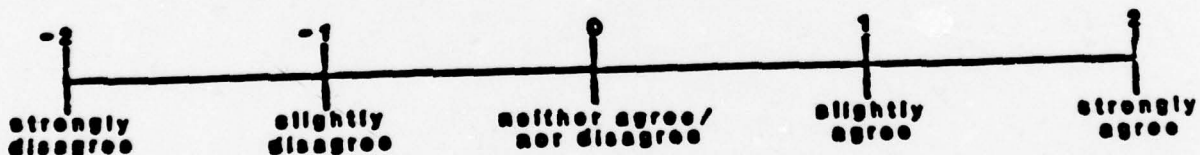
b.   The use of this item of equipment, Rifle
_____would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
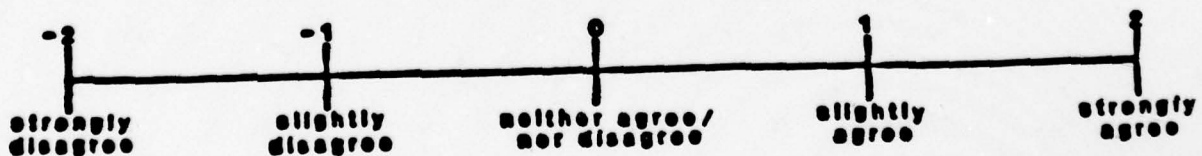
c.   The use of this item of equipment, Rifle
_____would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
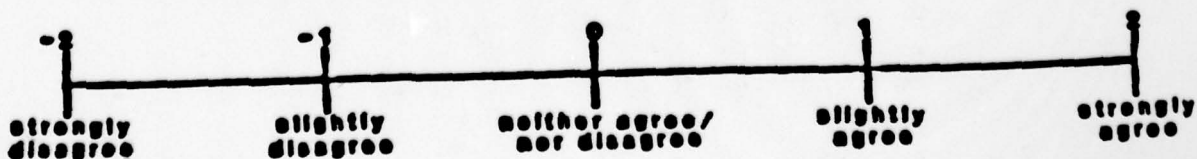
11. a. The use of this item of equipment, <u>Nightstick (std)</u>
_____would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
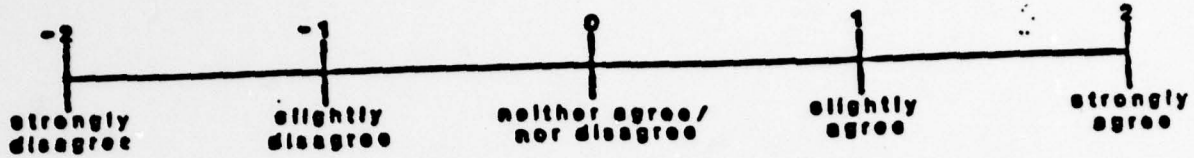
b. The use of this item of equipment, <u>Nightstick (std)</u>
_____would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
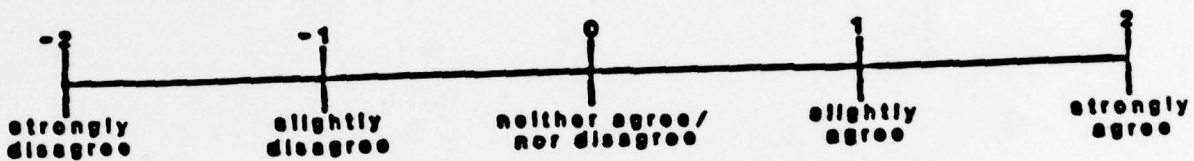
c. The use of this item of equipment, <u>Nightstick (std)</u>
_____would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
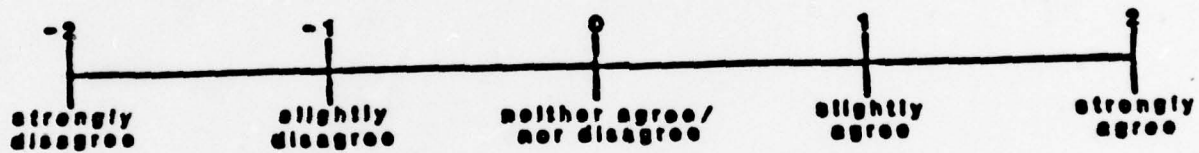
12. a. The use of this item of equipment, <u>Holster (std)</u>
_____would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
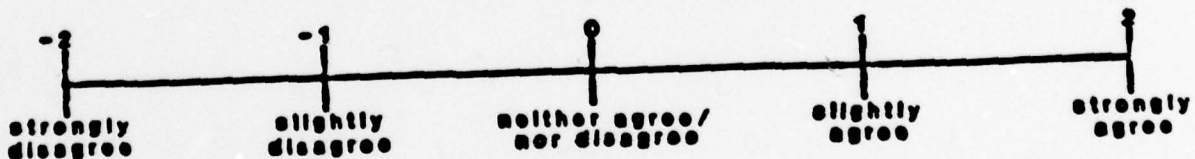
b. The use of this item of equipment, <u>Holster (std)</u>
_____would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
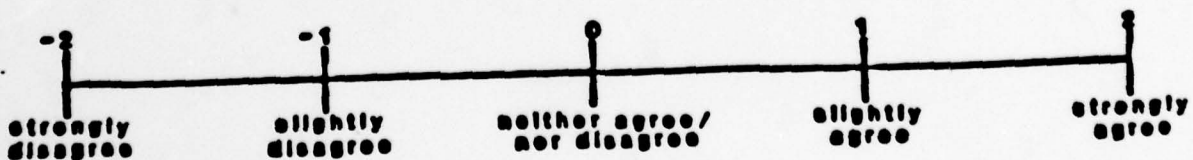
c. The use of this item of equipment, <u>Holster (std)</u>
_____would increase MP effectiveness.
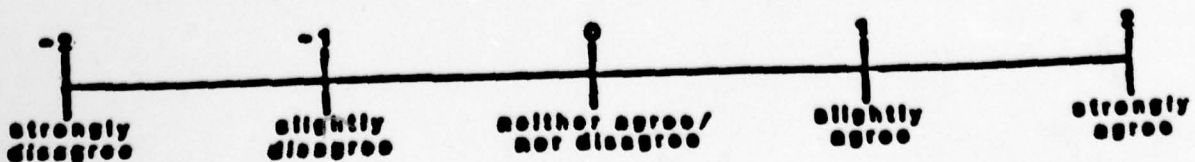
-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

B-13

13. a. The use of this item of equipment, _Holster (nonstd)_
_____would improve MP safety.

```
    -2              -1              0               1               2
     |               |              |               |               |
strongly        slightly      neither agree/     slightly       strongly
disagree        disagree       nor disagree        agree          agree
```

b. The use of this item of equipment, _Holster (nonstd)_
_____would help to reduce crime.

```
    -2              -1              0               1               2
     |               |              |               |               |
strongly        slightly      neither agree/     slightly       strongly
disagree        disagree       nor disagree        agree          agree
```

c. The use of this item of equipment, _Holster (nonstd)_
_____would increase MP effectiveness.

```
    -2              -1              0               1               2
     |               |              |               |               |
strongly        slightly      neither agree/     slightly       strongly
disagree        disagree       nor disagree        agree          agree
```
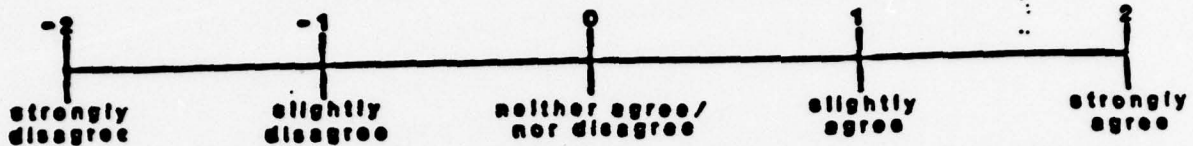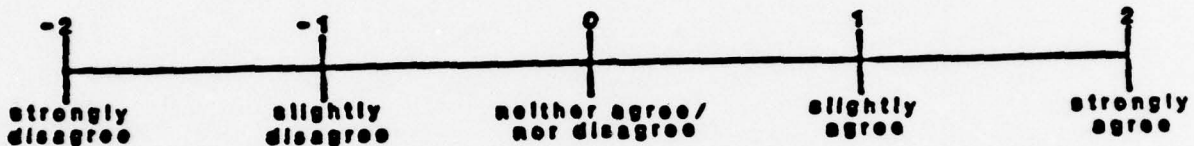
14. a. The use of this item of equipment, _Concealment Holsters_
_____would improve MP safety.

```
    -2              -1              0               1               2
     |               |              |               |               |
strongly        slightly      neither agree/     slightly       strongly
disagree        disagree       nor disagree        agree          agree
```
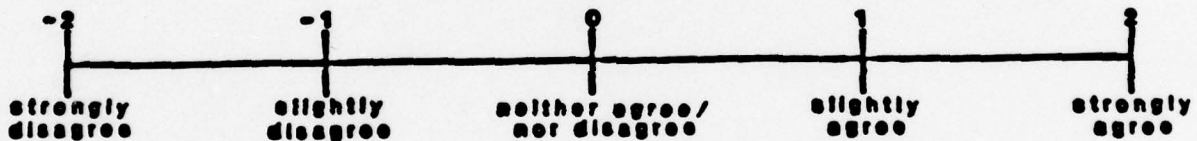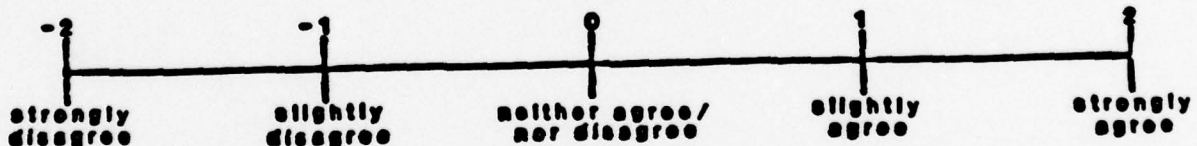
b. The use of this item of equipment, _Concealment Holsters_
_____would help to reduce crime.

```
    -2              -1              0               1               2
     |               |              |               |               |
strongly        slightly      neither agree/     slightly       strongly
disagree        disagree       nor disagree        agree          agree
```

c. The use of this item of equipment, _Concealment Holsters_
_____would increase MP effectiveness.

```
    -2              -1              0               1               2
     |               |              |               |               |
strongly        slightly      neither agree/     slightly       strongly
disagree        disagree       nor disagree        agree          agree
```

15. a. The use of this item of equipment, __Nightstick Holder__ would improve MP safety.
   __(std)__

```
  -2           -1            0            1            2
   |————————————|————————————|————————————|————————————|
strongly     slightly    neither agree/   slightly    strongly
disagree     disagree     nor disagree      agree        agree
```

   b. The use of this item of equipment, __Nightstick Holder__ would help to reduce crime.
   __(std)__

```
  -2           -1            0            1            2
   |————————————|————————————|————————————|————————————|
strongly     slightly    neither agree/   slightly    strongly
disagree     disagree     nor disagree      agree        agree
```

   c. The use of this item of equipment, __Nightstick Holder__ would increase MP effectiveness.
   __(std)__

```
  -2           -1            0            1            2
   |————————————|————————————|————————————|————————————|
strongly     slightly    neither agree/   slightly    strongly
disagree     disagree     nor disagree      agree        agree
```

16. a. The use of this item of equipment, __Nightstick Ring__ would improve MP safety.
   __Holder__

```
  -2           -1            0            1            2
   |————————————|————————————|————————————|————————————|
strongly     slightly    neither agree/   slightly    strongly
disagree     disagree     nor disagree      agree        agree
```

   b. The use of this item of equipment, __Nightstick Ring__ would help to reduce crime.
   __Holder__

```
  -2           -1            0            1            2
   |————————————|————————————|————————————|————————————|
strongly     slightly    neither agree/   slightly    strongly
disagree     disagree     nor disagree      agree        agree
```

   c. The use of this item of equipment, __Nightstick Ring__ would increase MP effectiveness.
   __Holder__

```
  -2           -1            0            1            2
   |————————————|————————————|————————————|————————————|
strongly     slightly    neither agree/   slightly    strongly
disagree     disagree     nor disagree      agree        agree
```

17. a. The use of this item of equipment, Leather Belt (std)
         _____ would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

   b. The use of this item of equipment, Leather Belt (std)
       _____ would help to reduce crime.
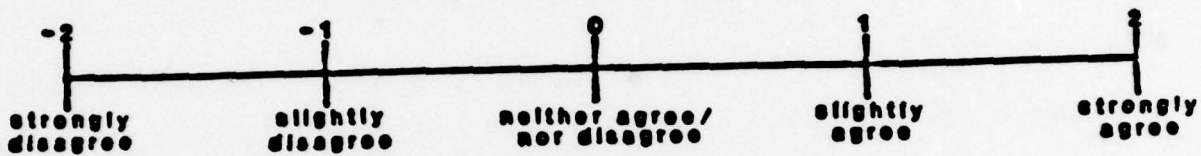
-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

   c. The use of this item of equipment, Leather Belt (std)
       _____ would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
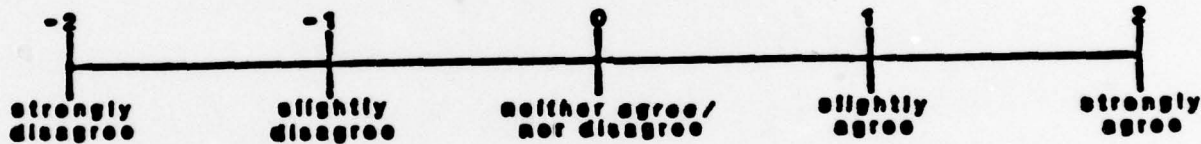
18. a. The use of this item of equipment, Webb Belt
         _____ would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
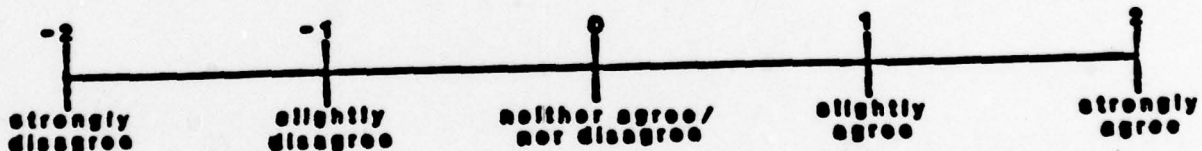
   b. The use of this item of equipment, Webb Belt
       _____ would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
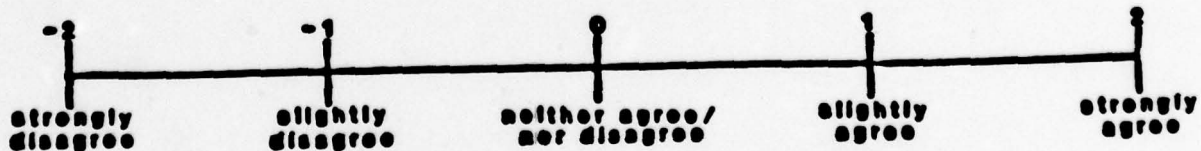
   c. The use of this item of equipment, Webb Belt
       _____ would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
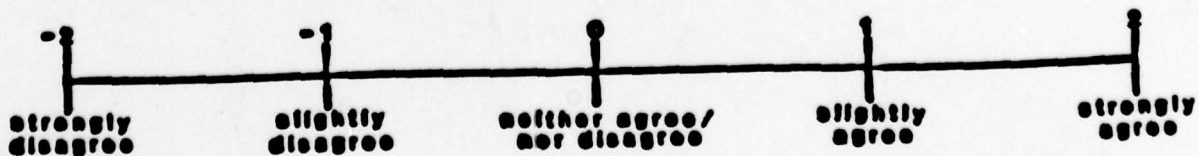
19. a. The use of this item of equipment, Flashlight (std)
         _____ would improve MP safety.

-2 ———— -1 ———— 0 ———— 1 ———— 2
strongly   slightly   neither agree/   slightly   strongly
disagree   disagree   nor disagree   agree   agree
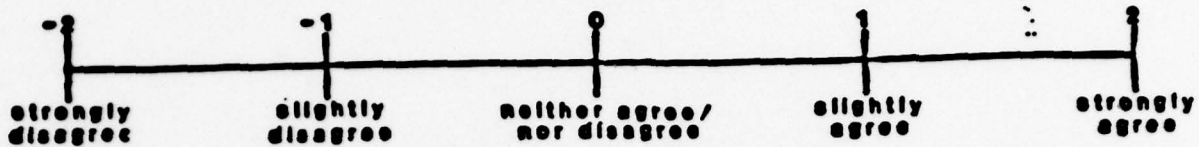
    b. The use of this item of equipment, Flashlight (std)
        _____ would help to reduce crime.

-2 ———— -1 ———— 0 ———— 1 ———— 2
strongly   slightly   neither agree/   slightly   strongly
disagree   disagree   nor disagree   agree   agree

    c. The use of this item of equipment, Flashlight (std)
        _____ would increase MP effectiveness.

-2 ———— -1 ———— 0 ———— 1 ———— 2
strongly   slightly   neither agree/   slightly   strongly
disagree   disagree   nor disagree   agree   agree

20. a. The use of this item of equipment, Flashlight (nonstd)
         _____ would improve MP safety.

-2 ———— -1 ———— 0 ———— 1 ———— 2
strongly   slightly   neither agree/   slightly   strongly
disagree   disagree   nor disagree   agree   agree

    b. The use of this item of equipment, Flashlight (nonstd)
        _____ would help to reduce crime.

-2 ———— -1 ———— 0 ———— 1 ———— 2
strongly   slightly   neither agree/   slightly   strongly
disagree   disagree   nor disagree   agree   agree

    c. The use of this item of equipment, Flashlight (nonstd)
        _____ would increase MP effectiveness.

-2 ———— -1 ———— 0 ———— 1 ———— 2
strongly   slightly   neither agree/   slightly   strongly
disagree   disagree   nor disagree   agree   agree

21. a. The use of this item of equipment, Uniform - Fatique
_____ would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

b. The use of this item of equipment, Uniform - Fatique
_____ would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

c. The use of this item of equipment, Uniform - Fatique
_____ would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
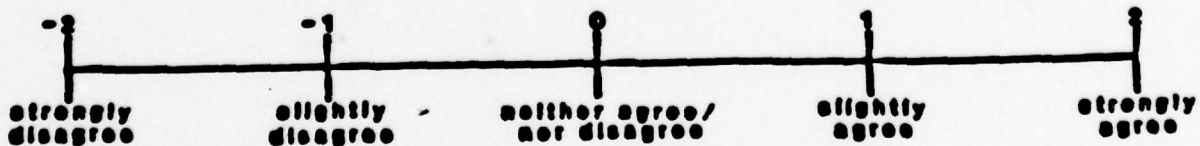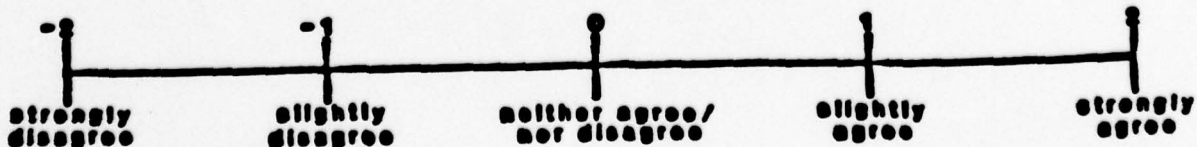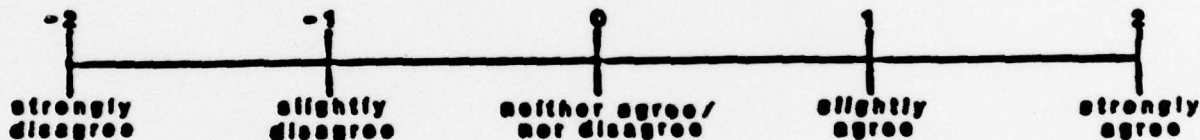
22. a. The use of this item of equipment, Uniform - Class A
_____ would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
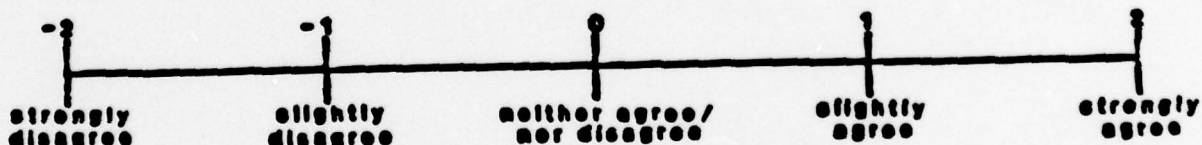
b. The use of this item of equipment, Uniform - Class A
_____ would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
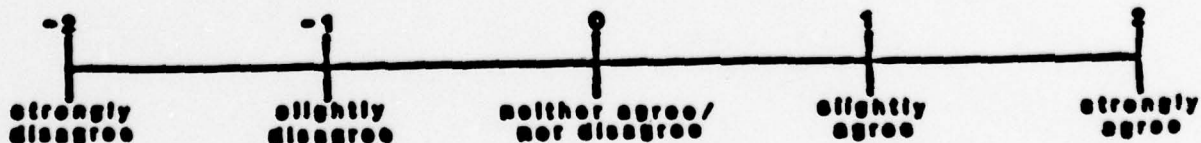
c. The use of this item of equipment, Uniform - Class A
_____ would increase MP effectiveness.
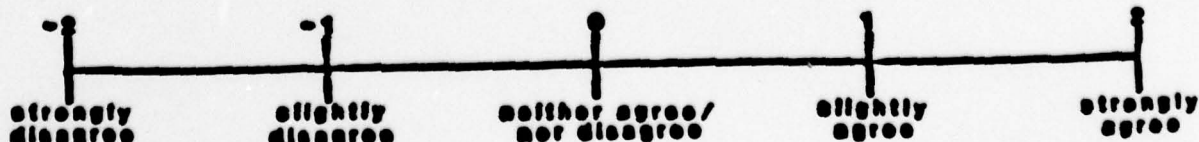
-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

23.　a.　The use of this item of equipment, __Field Jacket__
_____would improve MP safety.

```
    -2              -1              0               1               2
    |               |               |               |               |
    |───────────────────────────────────────────────────────────────|
strongly        slightly        neither agree/      slightly        strongly
disagree        disagree        nor disagree        agree           agree
```

　　b.　The use of this item of equipment, __Field Jacket__
_____would help to reduce crime.

```
    -2              -1              0               1               2
    |               |               |               |               |
    |───────────────────────────────────────────────────────────────|
strongly        slightly        neither agree/      slightly        strongly
disagree        disagree        nor disagree        agree           agree
```

　　c.　The use of this item of equipment, __Field Jacket__
_____would increase MP effectiveness.

```
    -2              -1              0               1               2
    |               |               |               |               |
    |───────────────────────────────────────────────────────────────|
strongly        slightly        neither agree/      slightly        strongly
disagree        disagree        nor disagree        agree           agree
```

24.　a.　The use of this item of equipment, __Flight Jacket__
_____would improve MP safety.

```
    -2              -1              0               1               2
    |               |               |               |               |
    |───────────────────────────────────────────────────────────────|
strongly        slightly        neither agree/      slightly        strongly
disagree        disagree        nor disagree        agree           agree
```

　　b.　The use of this item of equipment, __Flight Jacket__
_____would help to reduce crime.

```
    -2              -1              0               1               2
    |               |               |               |               |
    |───────────────────────────────────────────────────────────────|
strongly        slightly        neither agree/      slightly        strongly
disagree        disagree        nor disagree        agree           agree
```

　　c.　The use of this item of equipment, __Flight Jacket__
_____would increase MP effectiveness.

```
    -2              -1              0               1               2
    |               |               |               |               |
    |───────────────────────────────────────────────────────────────|
strongly        slightly        neither agree/      slightly        strongly
disagree        disagree        nor disagree        agree           agree
```
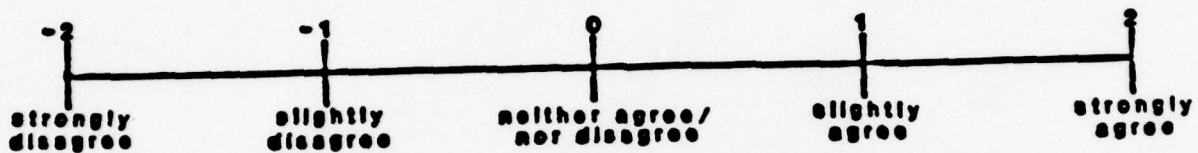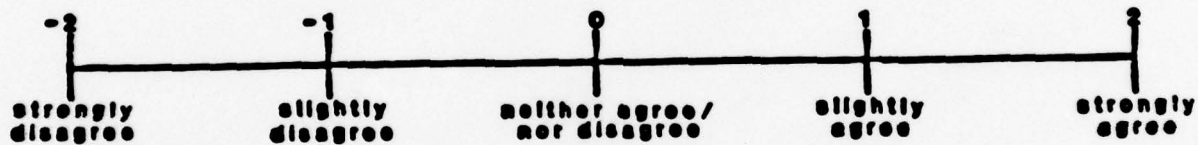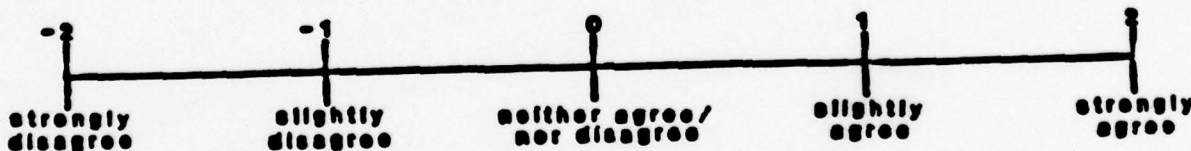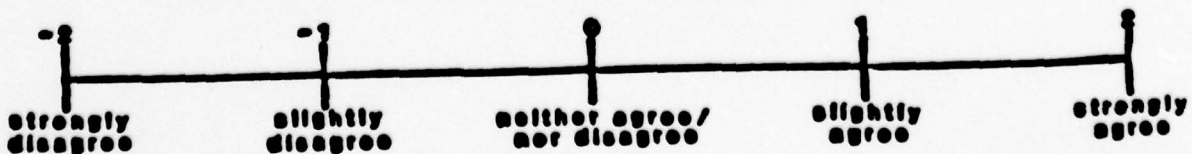
25.   a.   The use of this item of equipment, <u>Steel Pot</u>
<u>   </u>would improve MP safety.

```
 -2            -1             0             1             2
  |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
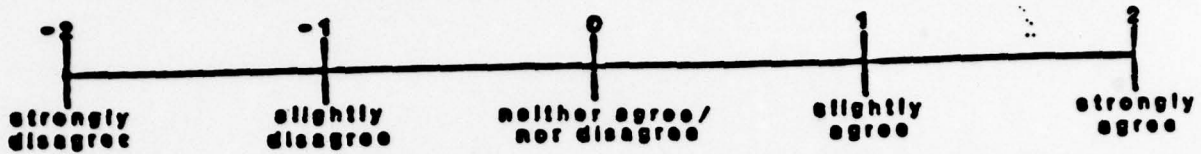
b.   The use of this item of equipment, <u>Steel Pot</u>
<u>   </u>would help to reduce crime.

```
 -2            -1             0             1             2
  |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
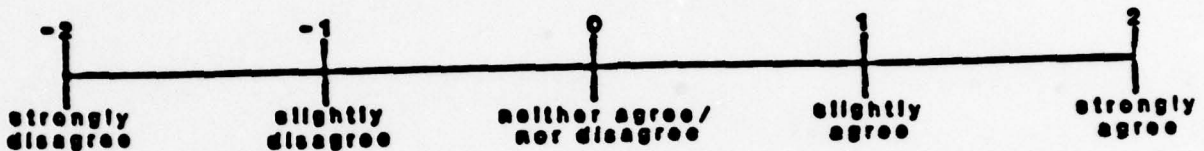
c.   The use of this item of equipment, <u>Steel Pot</u>
<u>   </u>would increase MP effectiveness.

```
 -2            -1             0             1             2
  |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
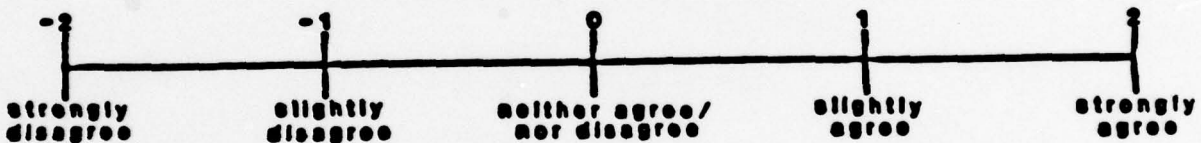
26.   a.   The use of this item of equipment, <u>Fatigue Cap</u>
<u>   </u>would improve MP safety.

```
 -2            -1             0             1             2
  |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
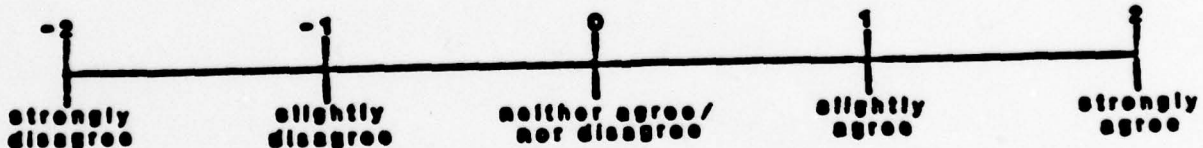
b.   The use of this item of equipment, <u>Fatigue Cap</u>
<u>   </u>would help to reduce crime.

```
 -2            -1             0             1             2
  |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
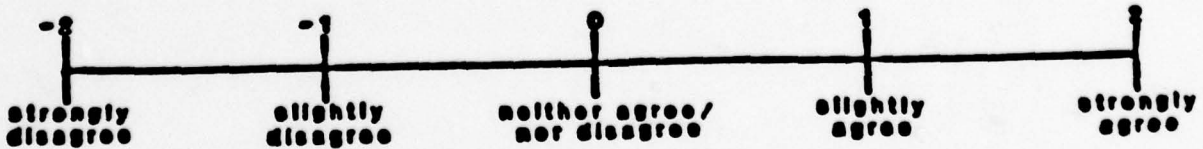
c.   The use of this item of equipment, <u>Fatigue Cap</u>
<u>   </u>would increase MP effectiveness.

```
 -2            -1             0             1             2
  |-------------|-------------|-------------|-------------|
strongly      slightly    neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
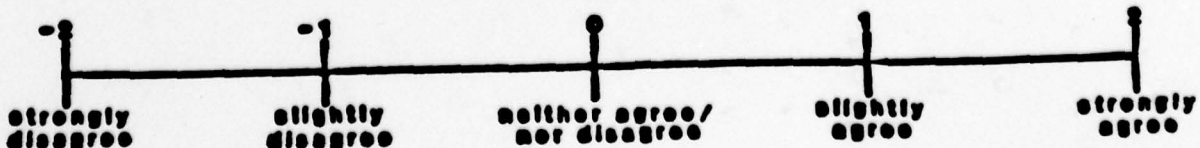
27.   a.   The use of this item of equipment, <u>Beret</u>
_____would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
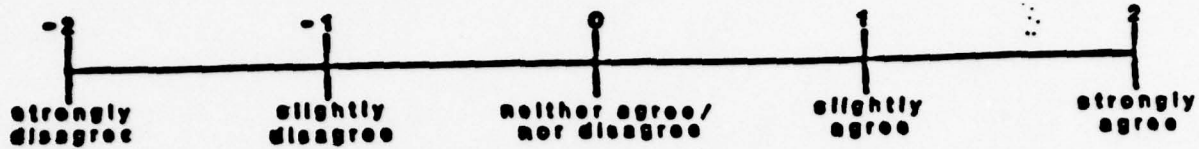
   b.   The use of this item of equipment, <u>Beret</u>
_____would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
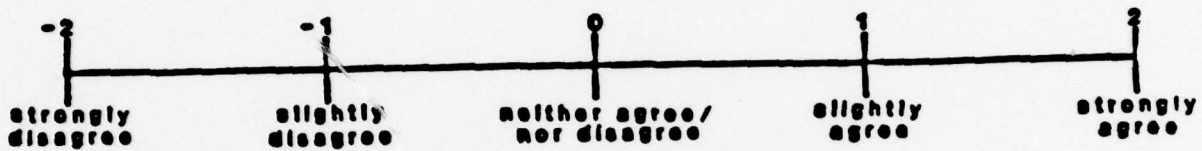
   c.   The use of this item of equipment, <u>Beret</u>
_____would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
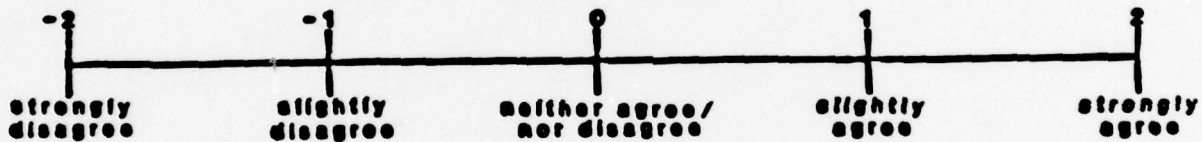
28.   a.   The use of this item of equipment, <u>Helmet Liner</u>
_____would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
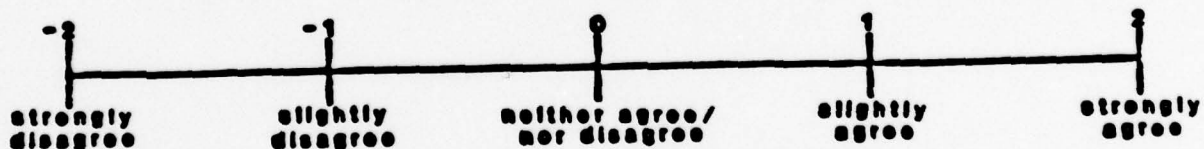
   b.   The use of this item of equipment, <u>Helmet Liner</u>
_____would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
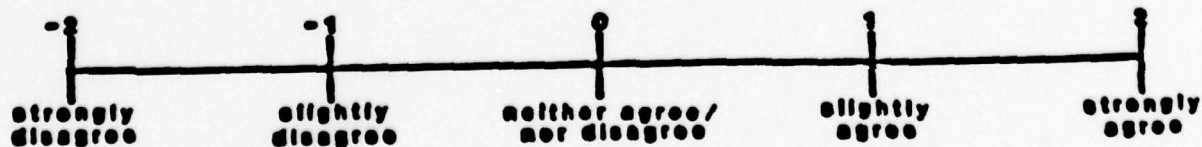
   c.   The use of this item of equipment, <u>Helmet Liner</u>
_____would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
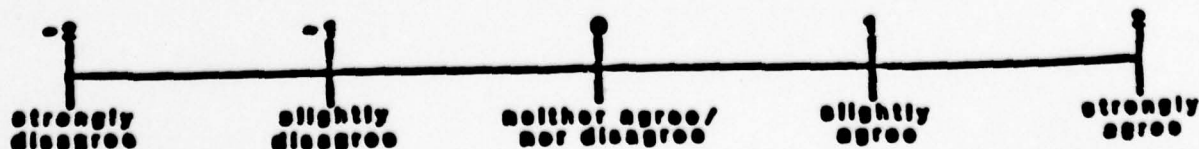
29.   a.   The use of this item of equipment, __White Hat_____
_____ would improve MP safety.

```
-2              -1              0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/  slightly        strongly
disagree        disagree        nor disagree    agree           agree
```
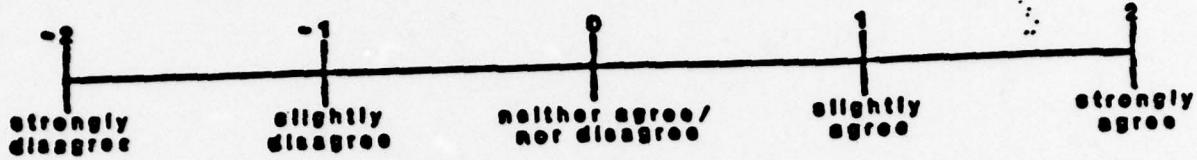
   b.   The use of this item of equipment, __White Hat_____
_____ would help to reduce crime.

```
-2              -1              0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/  slightly        strongly
disagree        disagree        nor disagree    agree           agree
```
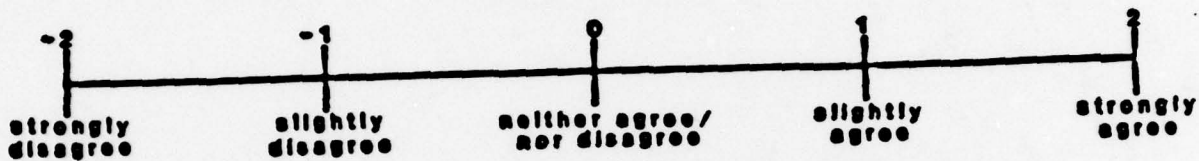
   c.   The use of this item of equipment, __White Hat_____
_____ would increase MP effectiveness.

```
-2              -1              0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/  slightly        strongly
disagree        disagree        nor disagree    agree           agree
```
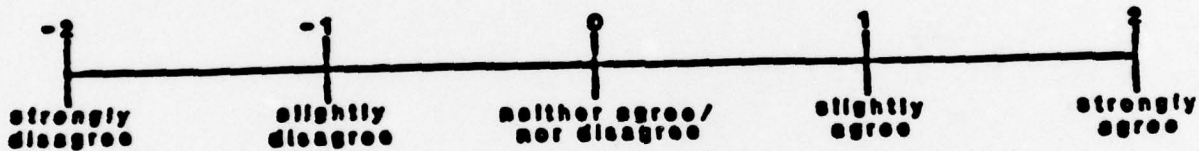
30.   a.   The use of this item of equipment, __Helicopters_____
_____ would improve MP safety.

```
-2              -1              0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/  slightly        strongly
disagree        disagree        nor disagree    agree           agree
```
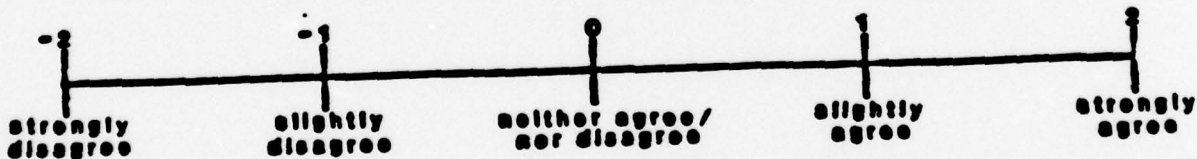
   b.   The use of this item of equipment, __Helicopters_____
_____ would help to reduce crime.
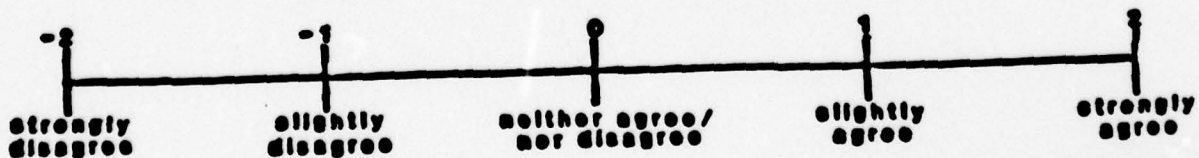
```
-2              -1              0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/  slightly        strongly
disagree        disagree        nor disagree    agree           agree
```

   c.   The use of this item of equipment, __Helicopters_____
_____ would increase MP effectiveness.

```
-2              -1              0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/  slightly        strongly
disagree        disagree        nor disagree    agree           agree
```
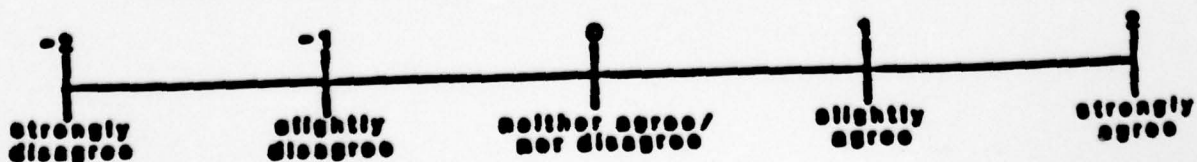
31. a. The use of this item of equipment, Vehicles – Sedan
     _____ would improve MP safety.

     -2   -1   0   1   2
     |───────────|──────────────|──────────────|──────────────|
   strongly   slightly   neither agree/   slightly   strongly
   disagree   disagree   nor disagree   agree   agree
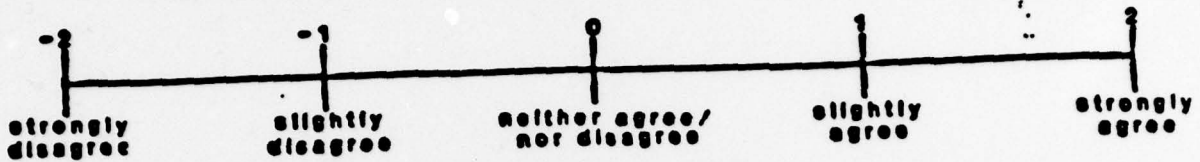
     b. The use of this item of equipment, Vehicles – Sedan
     _____ would help to reduce crime.

     -2   -1   0   1   2
     |───────────|──────────────|──────────────|──────────────|
   strongly   slightly   neither agree/   slightly   strongly
   disagree   disagree   nor disagree   agree   agree
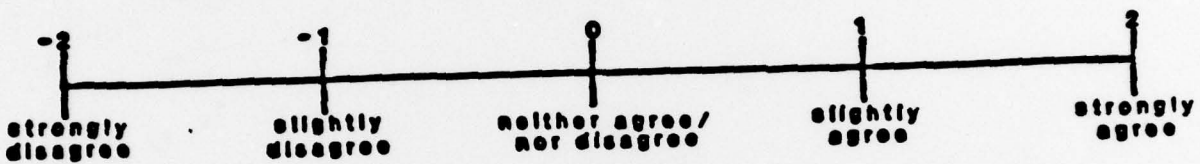
     c. The use of this item of equipment, Vehicles – Sedan
     _____ would increase MP effectiveness.

     -2   -1   0   1   2
     |───────────|──────────────|──────────────|──────────────|
   strongly   slightly   neither agree/   slightly   strongly
   disagree   disagree   nor disagree   agree   agree
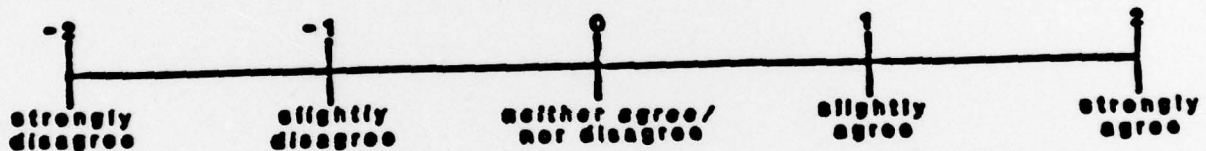
32. a. The use of this item of equipment, Vehicles – Compact
     _____ would improve MP safety.

     -2   -1   0   1   2
     |───────────|──────────────|──────────────|──────────────|
   strongly   slightly   neither agree/   slightly   strongly
   disagree   disagree   nor disagree   agree   agree
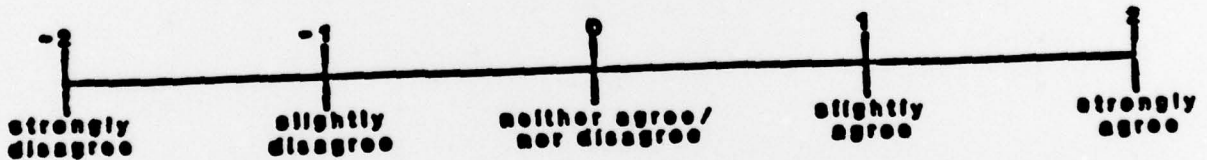
     b. The use of this item of equipment, Vehicles – Compact
     _____ would help to reduce crime.

     -2   -1   0   1   2
     |───────────|──────────────|──────────────|──────────────|
   strongly   slightly   neither agree/   slightly   strongly
   disagree   disagree   nor disagree   agree   agree
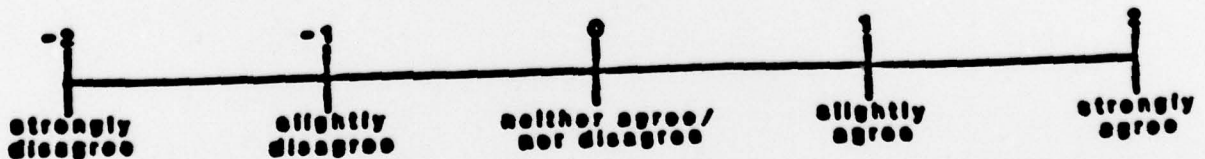
     c. The use of this item of equipment, Vehicles – Compact
     _____ would increase MP effectiveness.

     -2   -1   0   1   2
     |───────────|──────────────|──────────────|──────────────|
   strongly   slightly   neither agree/   slightly   strongly
   disagree   disagree   nor disagree   agree   agree

33.   a.   The use of this item of equipment, _Emergency Lights, Siren_ _& P.A. System on vehicle_ would improve MP safety.

```
    -2              -1               0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/   slightly        strongly
disagree        disagree        nor disagree     agree           agree
```

b.   The use of this item of equipment, _Emergency Lights, Siren_ _& P.A. System on vehicle_ would help to reduce crime.

```
    -2              -1               0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/   slightly        strongly
disagree        disagree        nor disagree     agree           agree
```

c.   The use of this item of equipment, _Emergency Lights, Siren_ _& P.A. System on vehicle_ would increase MP effectiveness.

```
    -2              -1               0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/   slightly        strongly
disagree        disagree        nor disagree     agree           agree
```

34.   a.   The use of this item of equipment, _Divider between front_ _and back seat of vehicle_ would improve MP safety.

```
    -2              -1               0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/   slightly        strongly
disagree        disagree        nor disagree     agree           agree
```

b.   The use of this item of equipment, _Divider between front_ _and back seat of vehicle_ would help to reduce crime.

```
    -2              -1               0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/   slightly        strongly
disagree        disagree        nor disagree     agree           agree
```

c.   The use of this item of equipment, _Divider between front_ _and back seat of vehicle_ would increase MP effectiveness.

```
    -2              -1               0               1               2
|---------------|---------------|---------------|---------------|
strongly        slightly        neither agree/   slightly        strongly
disagree        disagree        nor disagree     agree           agree
```

35. a. The use of this item of equipment, Kojack Light for
         vehicle _____ would improve MP safety.

```
  -2            -1            0            1            2
   |-------------|------------|------------|------------|
strongly      slightly    neither agree/  slightly    strongly
disagree      disagree     nor disagree     agree       agree
```

   b. The use of this item of equipment, Kojack Light for
       vehicle _____ would help to reduce crime.

```
  -2            -1            0            1            2
   |-------------|------------|------------|------------|
strongly      slightly    neither agree/  slightly    strongly
disagree      disagree     nor disagree     agree       agree
```

   c. The use of this item of equipment, Kojack Light for
       vehicle _____ would increase MP effectiveness.

```
  -2            -1            0            1            2
   |-------------|------------|------------|------------|
strongly      slightly    neither agree/  slightly    strongly
disagree      disagree     nor disagree     agree       agree
```

36. a. The use of this item of equipment, Spotlight on vehicle
         _____ would improve MP safety.

```
  -2            -1            0            1            2
   |-------------|------------|------------|------------|
strongly      slightly    neither agree/  slightly    strongly
disagree      disagree     nor disagree     agree       agree
```

   b. The use of this item of equipment, Spotlight on vehicle
       _____ would help to reduce crime.

```
  -2            -1            0            1            2
   |-------------|------------|------------|------------|
strongly      slightly    neither agree/  slightly    strongly
disagree      disagree     nor disagree     agree       agree
```

   c. The use of this item of equipment, Spotlight on vehicle
       _____ would increase MP effectiveness.

```
  -2            -1            0            1            2
   |-------------|------------|------------|------------|
strongly      slightly    neither agree/  slightly    strongly
disagree      disagree     nor disagree     agree       agree
```

37.　a.　The use of this item of equipment, <u>Stationary Car Radio</u>
　　　　<u>in vehicle</u>_____would improve MP safety.

```
 -2          -1           0            1            2
  |           |           |            |            |
strongly    slightly   neither agree/  slightly    strongly
disagree    disagree    nor disagree    agree        agree
```

　　　b.　The use of this item of equipment, <u>Stationary Car Radio</u>
　　　　<u>in vehicle</u>_____would help to reduce crime.

```
 -2          -1           0            1            2
  |           |           |            |            |
strongly    slightly   neither agree/  slightly    strongly
disagree    disagree    nor disagree    agree        agree
```

　　　c.　The use of this item of equipment, <u>Stationary Car Radio</u>
　　　　<u>in vehicle</u>_____would increase MP effectiveness.

```
 -2          -1           0            1            2
  |           |           |            |            |
strongly    slightly   neither agree/  slightly    strongly
disagree    disagree    nor disagree    agree        agree
```

38.　a.　The use of this item of equipment, <u>Binoculars</u>
　　　　_____would improve MP safety.

```
 -2          -1           0            1            2
  |           |           |            |            |
strongly    slightly   neither agree/  slightly    strongly
disagree    disagree    nor disagree    agree        agree
```
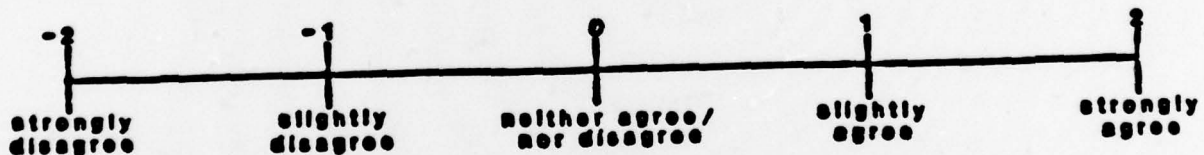
　　　b.　The use of this item of equipment, <u>Binoculars</u>
　　　　_____would help to reduce crime.

```
 -2          -1           0            1            2
  |           |           |            |            |
strongly    slightly   neither agree/  slightly    strongly
disagree    disagree    nor disagree    agree        agree
```
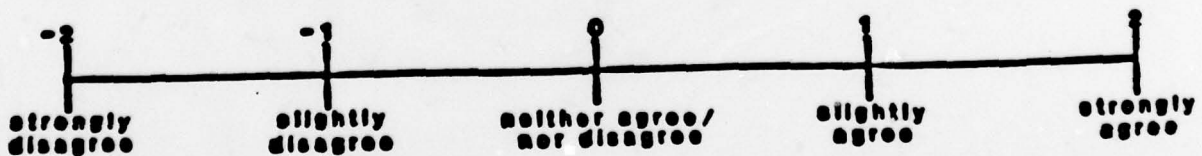
　　　c.　The use of this item of equipment, <u>Binoculars</u>
　　　　_____would increase MP effectiveness.

```
 -2          -1           0            1            2
  |           |           |            |            |
strongly    slightly   neither agree/  slightly    strongly
disagree    disagree    nor disagree    agree        agree
```
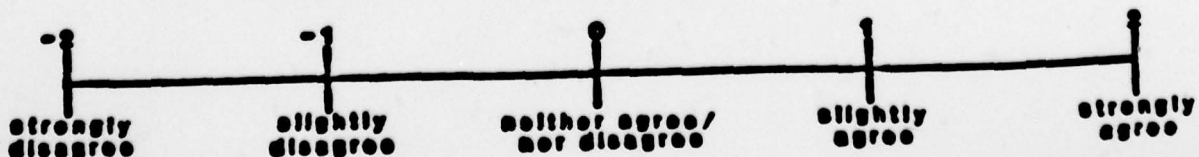
39.   a.   The use of this item of equipment, Night Vision Devices
            _____ would improve MP safety.

```
    -2              -1              0               1               2
    |───────────────|───────────────|───────────────|───────────────|
strongly        slightly       neither agree/     slightly        strongly
disagree        disagree        nor disagree        agree           agree
```
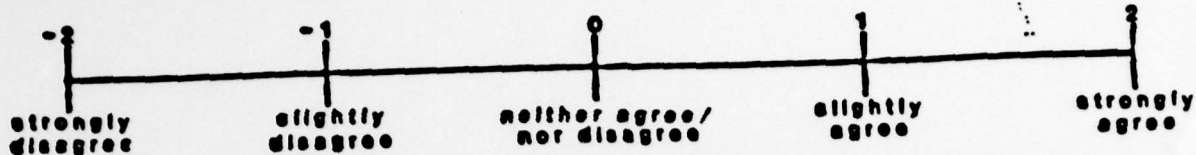
       b.   The use of this item of equipment, Night Vision Devices
            _____ would help to reduce crime.

```
    -2              -1              0               1               2
    |───────────────|───────────────|───────────────|───────────────|
strongly        slightly       neither agree/     slightly        strongly
disagree        disagree        nor disagree        agree           agree
```

       c.   The use of this item of equipment, Night Vision Devices
            _____ would increase MP effectiveness.
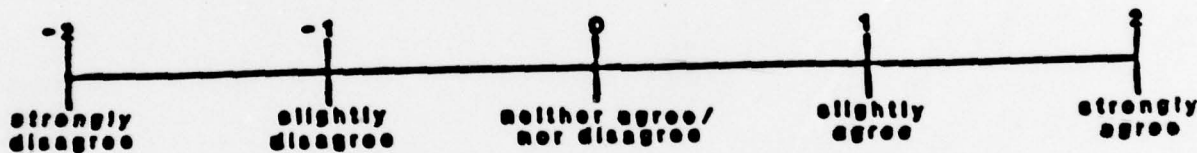
```
    -2              -1              0               1               2
    |───────────────|───────────────|───────────────|───────────────|
strongly        slightly       neither agree/     slightly        strongly
disagree        disagree        nor disagree        agree           agree
```
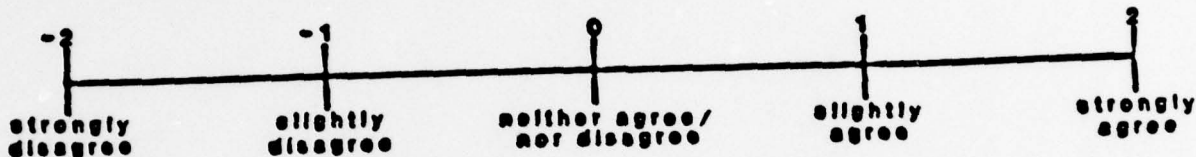
40.   a.   The use of this item of equipment, Polaroid Camera
            _____ would improve MP safety.

```
    -2              -1              0               1               2
    |───────────────|───────────────|───────────────|───────────────|
strongly        slightly       neither agree/     slightly        strongly
disagree        disagree        nor disagree        agree           agree
```

       b.   The use of this item of equipment, Polaroid Camera
            _____ would help to reduce crime.

```
    -2              -1              0               1               2
    |───────────────|───────────────|───────────────|───────────────|
strongly        slightly       neither agree/     slightly        strongly
disagree        disagree        nor disagree        agree           agree
```

       c.   The use of this item of equipment, Polaroid Camera
            _____ would increase MP effectiveness.

```
    -2              -1              0               1               2
    |───────────────|───────────────|───────────────|───────────────|
strongly        slightly       neither agree/     slightly        strongly
disagree        disagree        nor disagree        agree           agree
```

41.   a.   The use of this item of equipment, _35mm Camera_
_____ would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

       b.   The use of this item of equipment, _35mm Camera_
_____ would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

       c.   The use of this item of equipment, _35mm Camera_
_____ would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
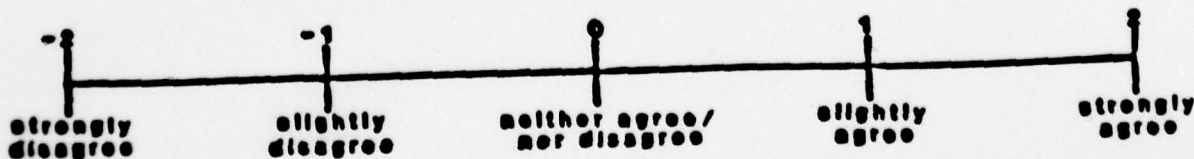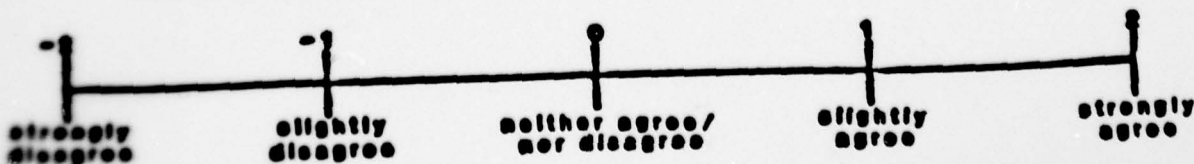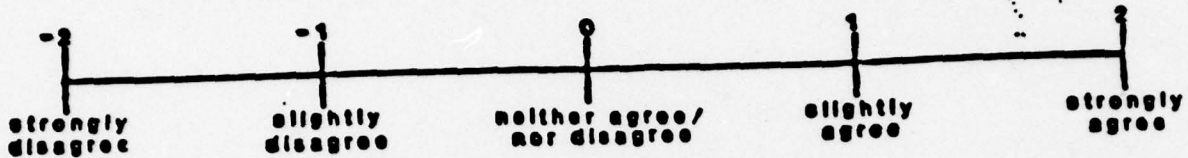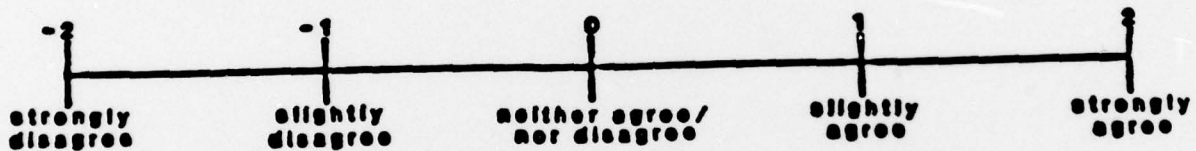
42.   a.   The use of this item of equipment, _Latent Finger Print_
_Field Kit (std)_____ would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
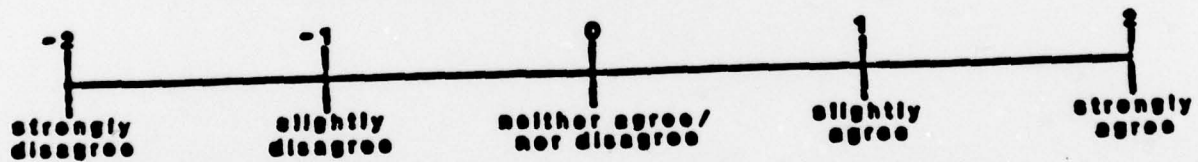
       b.   The use of this item of equipment, _Latent Finger Print_
_Field Kit (std)_____ would help to reduce crime.
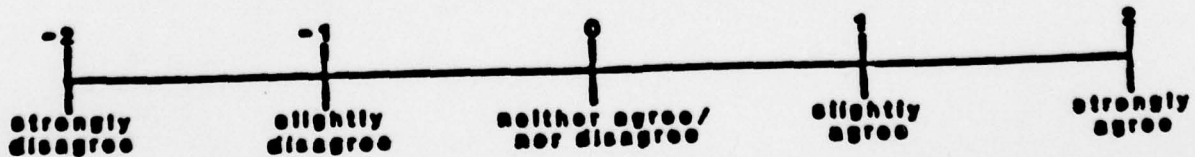
-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

       c.   The use of this item of equipment, _Latent Finger Print_
_Field Kit (std)_____ would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

43.   a.   The use of this item of equipment, <u>Latent Finger Print</u>
<u>Field Kit (nonstd)</u> would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

b.   The use of this item of equipment, <u>Latent Finger Print</u>
<u>Field Kit (nonstd)</u> would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

c.   The use of this item of equipment, <u>Latent Finger Print</u>
<u>Field Kit (nonstd)</u> would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
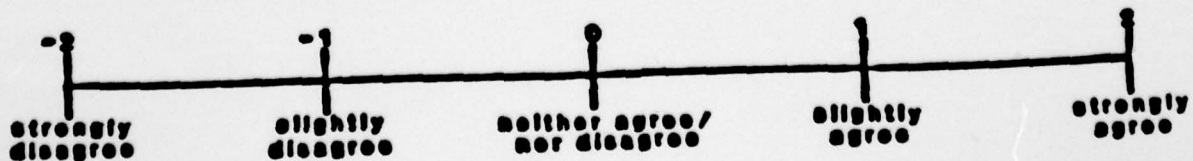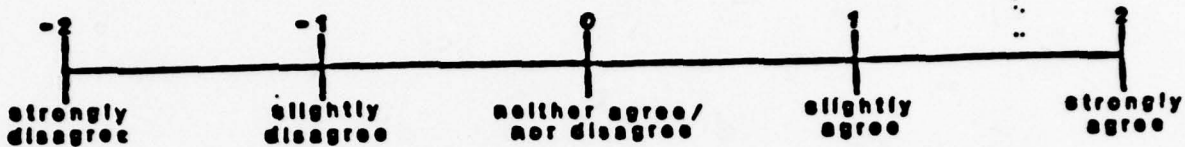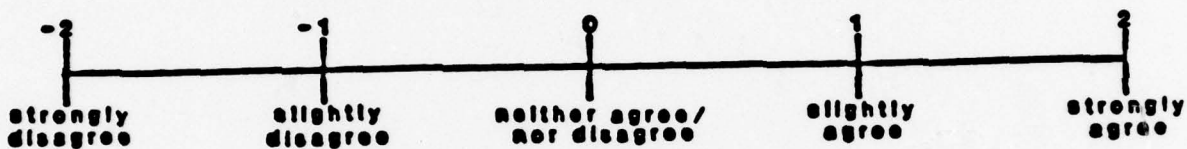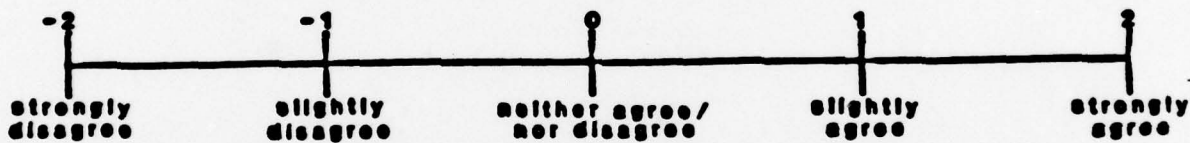
44.   a.   The use of this item of equipment, <u>Drug Field Test Kit</u>
would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
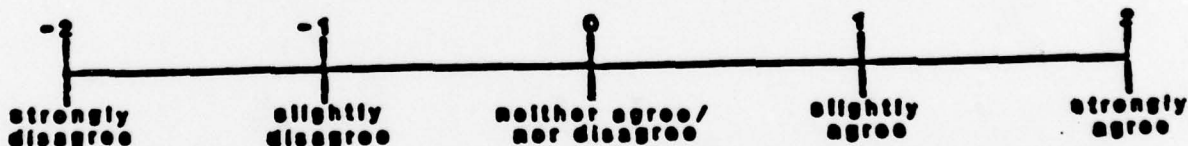
b.   The use of this item of equipment, <u>Drug Field Test Kit</u>
would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
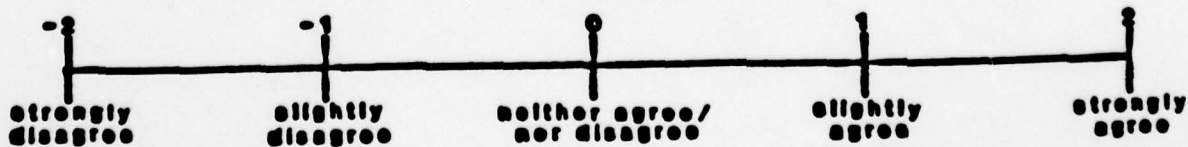
c.   The use of this item of equipment, <u>Drug Field Test Kit</u>
would increase MP effectiveness.
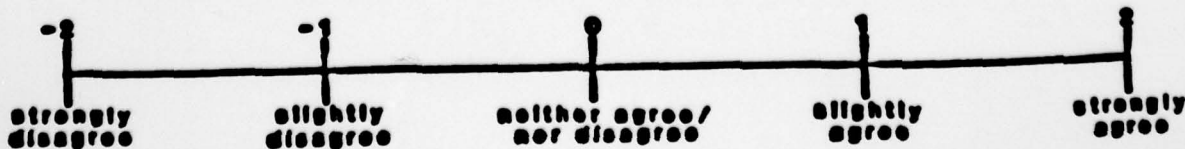
-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree

45. a. The use of this item of equipment, __Intoxilizer_____
_____would improve MP safety.

```
    -2              -1              0               1               2
    |---------------|---------------|---------------|---------------|
 strongly        slightly      neither agree/     slightly       strongly
 disagree        disagree       nor disagree        agree          agree
```

b. The use of this item of equipment, __Intoxilizer_____
_____would help to reduce crime.

```
    -2              -1              0               1               2
    |---------------|---------------|---------------|---------------|
 strongly        slightly      neither agree/     slightly       strongly
 disagree        disagree       nor disagree        agree          agree
```

c. The use of this item of equipment, __Intoxilizer_____
_____would increase MP effectiveness.

```
    -2              -1              0               1               2
    |---------------|---------------|---------------|---------------|
 strongly        slightly      neither agree/     slightly       strongly
 disagree        disagree       nor disagree        agree          agree
```

46. a. The use of this item of equipment, __Breathalizer_____
_____would improve MP safety.

```
    -2              -1              0               1               2
    |---------------|---------------|---------------|---------------|
 strongly        slightly      neither agree/     slightly       strongly
 disagree        disagree       nor disagree        agree          agree
```

b. The use of this item of equipment, __Breathalizer_____
_____would help to reduce crime.

```
    -2              -1              0               1               2
    |---------------|---------------|---------------|---------------|
 strongly        slightly      neither agree/     slightly       strongly
 disagree        disagree       nor disagree        agree          agree
```

c. The use of this item of equipment, __Breathalizer_____
_____would increase MP effectiveness.

```
    -2              -1              0               1               2
    |---------------|---------------|---------------|---------------|
 strongly        slightly      neither agree/     slightly       strongly
 disagree        disagree       nor disagree        agree          agree
```
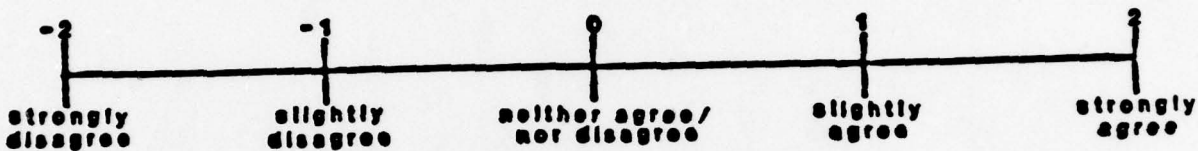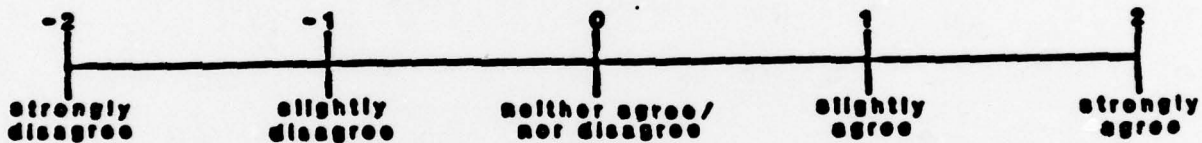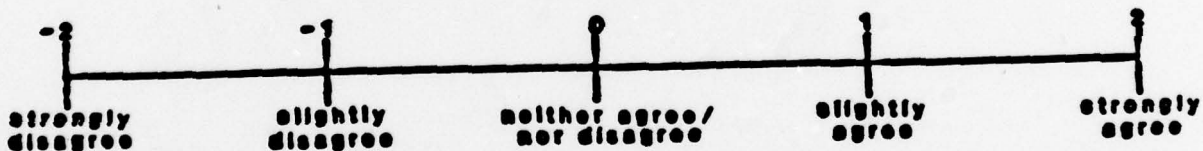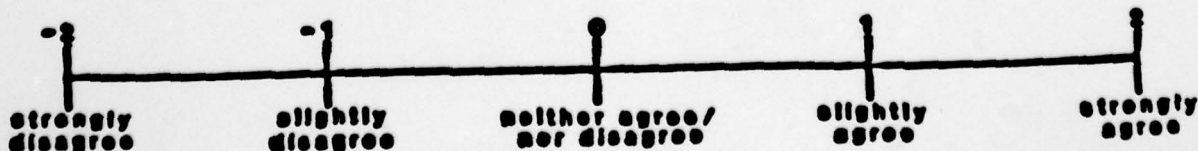
47. a. The use of this item of equipment, Radar – Stationary would improve MP safety.

```
   -2            -1            0            1            2
   |─────────────|────────────|────────────|────────────|
strongly      slightly     neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
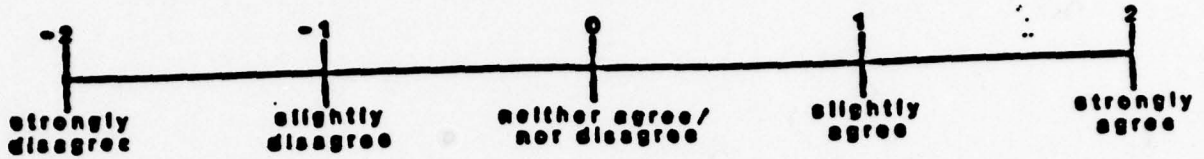
b. The use of this item of equipment, Radar – Stationary would help to reduce crime.

```
   -2            -1            0            1            2
   |─────────────|────────────|────────────|────────────|
strongly      slightly     neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
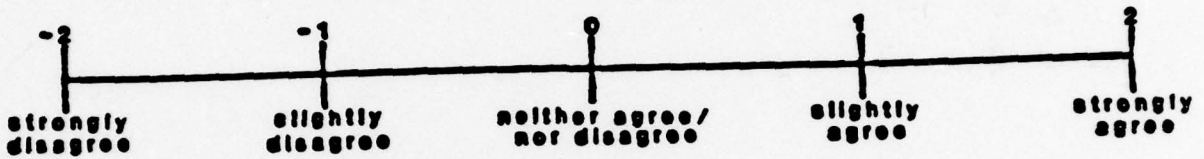
c. The use of this item of equipment, Radar – Stationary would increase MP effectiveness.

```
   -2            -1            0            1            2
   |─────────────|────────────|────────────|────────────|
strongly      slightly     neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
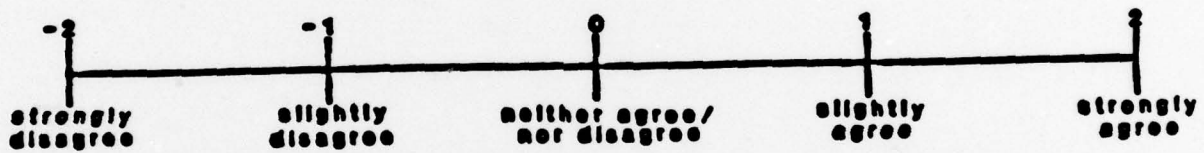
48. a. The use of this item of equipment, Radar – Moving would improve MP safety.

```
   -2            -1            0            1            2
   |─────────────|────────────|────────────|────────────|
strongly      slightly     neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
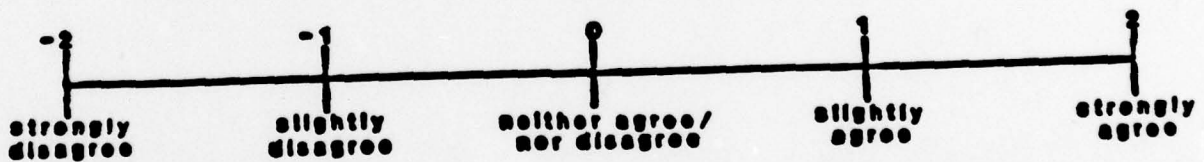
b. The use of this item of equipment, Radar – Moving would help to reduce crime.

```
   -2            -1            0            1            2
   |─────────────|────────────|────────────|────────────|
strongly      slightly     neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
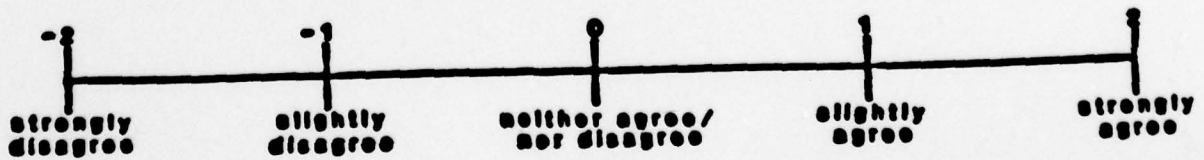
c. The use of this item of equipment, Radar – Moving would increase MP effectiveness.

```
   -2            -1            0            1            2
   |─────────────|────────────|────────────|────────────|
strongly      slightly     neither agree/   slightly    strongly
disagree      disagree     nor disagree     agree        agree
```
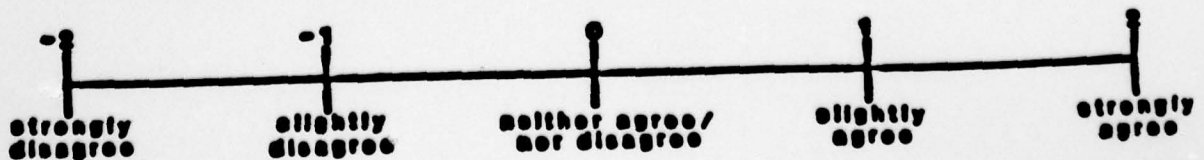
49. a. The use of this item of equipment, Radar – Speed Gun
_____ would improve MP safety.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
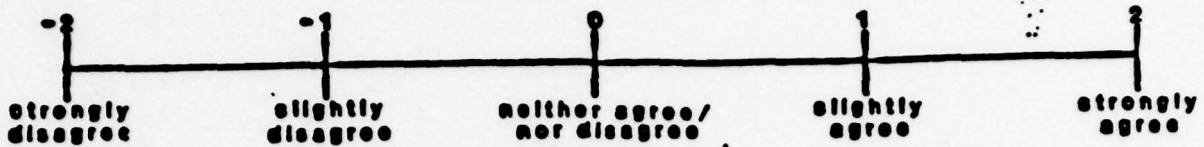
b. The use of this item of equipment, Radar – Speed Gun
_____ would help to reduce crime.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
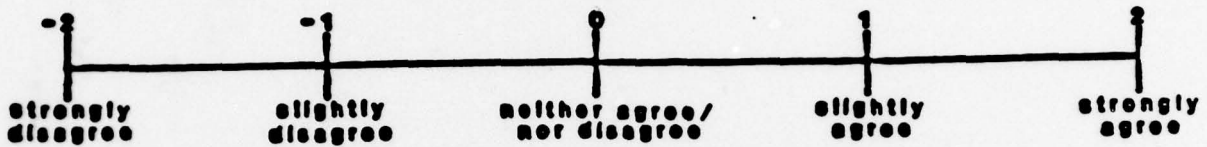
c. The use of this item of equipment, Radar – Speed Gun
_____ would increase MP effectiveness.

-2	-1	0	1	2
strongly disagree	slightly disagree	neither agree/ nor disagree	slightly agree	strongly agree
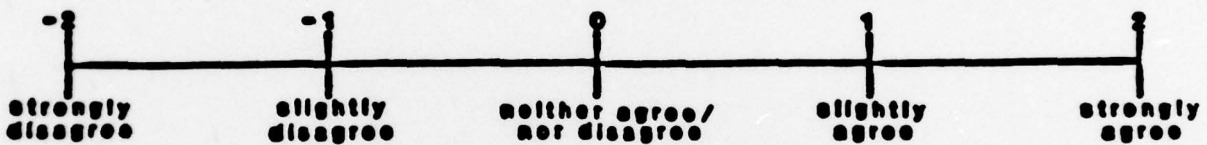
Complete the last two sections.

A. Military Work Experience:

MOS_____

Yrs. experience in MP_____

Type of experience/List garrison duties_____

_____

_____

Experience with equipment/List items

_____   _____

_____   _____

_____   _____

_____   _____

B. Rank order the following three evaluation issues according
    to order of importance for successful MP job performance.
    Assign #1 to the most important issue, #2 to the second
    most important issue, and #3 to the least important issue.
    Assign #

    _____   improvement in MP safety

    _____   reduction in crime

    _____   increase in MP effectiveness

Thanks for your cooperation and participation. Please return
this booklet to the researcher.

APPENDIX C

MEAN RATINGS OF SELECTED ITEMS
OF LAW ENFORCEMENT EQUIPMENT
ALONG THREE DIMENSIONS

Item #	Item Name	Improvement in Safety $\overline{X}$	Reduction in Crime $\overline{X}$	Increase in Effectiveness $\overline{X}$
1.	Communications and Command Console w/patching and tracking capability	4.11	3.74	4.48
2.	Recorder in Station	3.81	3.48	4.11
3.	Teletype Terminals	3.96	4.03	4.66
4.	TV Monitors in Station	4.0	3.14	4.03
5.	Portable Walkie/Talkie	4.51	3.74	4.66
6.	45 Pistol	3.59	3.40	3.33
7.	38 Revolver 2in.	3.18	2.97	3.0
8.	38 Revolver 4in.	3.55	2.86	3.33
9.	357 Magnum	2.54	2.30	2.38
10.	Rifle	3.55	3.18	3.40
11.	Nightstick(std)	3.96	3.03	3.66
12.	Holster(std)	2.89	2.19	2.56
13.	Holster(nonstd)	3.81	2.89	3.66
14.	Concealment Holsters	2.67	2.38	2.67
15.	Nightstick Holder(std)	2.54	2.04	2.54
16.	Nightstick Ring Holder(nonstd)	4.03	3.03	3.96
17.	Leather Belt(std)	2.89	2.39	2.66
18.	Web Belt	3.15	2.89	3.19
19.	Flashlight(std)	3.81	3.51	3.59

Item #	Item Name	Improvement in Safety $\bar{x}$	Reduction in Crime $\bar{x}$	Increase in Effectiveness $\bar{x}$
20.	Flashlight (nonstd)	4.33	3.70	4.25
21.	Uniform-Fatique	3.92	3.11	4.23
22.	Uniform-Class A	1.93	2.47	2.08
23.	Field Jacket	2.89	2.39	2.77
24.	Flight Jacket	3.42	2.74	3.38
25.	Steel Pot	2.86	1.82	1.82
26.	Fatique Cap	2.38	2.19	2.67
27.	Beret	2.0	2.23	2.18
28.	Helmet Liner	3.19	2.43	3.07
29.	White Hat	2.62	3.37	2.97
30.	Helicopters	4.03	4.62	4.74
31.	Vehicles-Sedan	4.51	4.40	4.70
32.	Vehicles-Compact	3.22	3.85	3.81
33.	Emergency Lights, Siren, and PA System on vehicle	4.9	4.55	4.85
34.	Divider between front and back seat	4.96	3.25	4.44
35.	Kojak Light for vehicle	2.97	2.89	3.11
36.	Spotlight on vehicle	4.48	4.74	4.92
37.	Stationary Car Radio in vehicle	4.62	4.22	4.66
38.	Binoculars	3.66	4.07	4.48
39.	Night Vision Devices	4.03	4.40	4.48
40.	Polaroid Camera	2.58	3.03	4.23
41.	35mm Camera	2.58	3.03	3.84

Item #	Item Name	Improvement in Safety $\overline{x}$	Reduction in Crime $\overline{x}$	Increase in Effectiveness $\overline{x}$
42.	Latent Finger Print Kit(std)	3.96	3.07	3.76
43.	Latent Finger Print Kit(nonstd)	2.12	3.36	3.92
44.	Drug Field Test Kit	2.74	3.61	4.42
45.	Intoxilizer	3.18	3.81	4.33
46.	Breathalizer	3.03	4.0	4.61
47.	Radar-Stationary	2.93	4.07	4.38
48.	Radar-Moving	3.22	4.55	4.81
49.	Radar-Speed Gun	3.18	4.33	4.40