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## TM-11-94

# Evaluation of Pepper Spray for the Winnipeg Police Department

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Winnipeg Police Department

TECHNICAL MEMORANDUM

Submitted by  
Winnipeg Police Department

February, 1994

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## SUMMARY

The Winnipeg Police Department reviewed the use of the OC spray product and decided to use the Def Tec as it was reported by both the Royal Canadian Mounted Police and the Calgary Police Service that it was the superior OC product.

“First Defense” Mark III, produced by the Def Tec Corporation was selected for the four month evaluation period. There were 181 officers trained in the use of the product.

During the evaluation period the OC product was effectively used 71 (91%) out of 78. Of the 22 outdoor useages 19(86%) were effective.

The study recommended the following:

- . training should emphasize spraying from three feet and further from the person sprayed.
- . better decontamination procedures be developed.
- . training be developed for defensive tactics for officers encountering individuals who have OC spray.
- . a “use of force” form be developed to monitor OC spray useage.

For information concerning this report contact:

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## RÉSUMÉ

Le Service de police de Winnipeg a étudié l'utilisation de produits en aerosol à base d'oléorésine capsicum (OC) et décide d'employer celui de Def Tec, recommande par la Gendarmerie royale du Canada et le Service de police de Calgary comme étant le meilleur en son genre.

Le produit ((First Defence, Mark III» de la Def Tec Corporation est celui qu'on a retenu pour l'essai de quatre mois. On a enseigné à 181 agents comment utiliser ce produit.

Pendant la période d'évaluation le produit à base d'OC a été utilisé efficacement 71 fois (91 %) sur une possibilité de 78. Dans les 22 cas d'utilisation à l'extérieur, il a été efficace 19 fois (86 %).

Recommandations de l'étude :

- insister au moment de la formation sur le fait que la vaporisation doit être effectuée à trois pieds ou plus de la personne visée;
- élaborer de meilleures techniques de décontamination;
- concevoir des séances de formation sur les tactiques défensives pour les agents aux prises avec des individus munis de neutralisants en aerosol à base d'OC
- élaborer un formulaire sur l'utilisation de force pour surveiller l'utilisation de produits à base d'OC.

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# OLEORESIN CAPSICUM (OC) ANALYSIS

## INTRODUCTION

After several years of scrutiny, the Winnipeg Police Department embarked on a program to review the use of an OC Spray product. A exhaustive review in both Canada and the United States of all available OC products was conducted in order to determine which was the most effective. It was found that two products were predominant - the Cap Stun and Def Tec lines. Subsequent studies by both the RCMP and the Calgary Police Service indicated that the Def Tec line was noticeably superior.

As a result, it was decided to utilize only the Def Tec Corp. "First Defense" Mark III product. The test period extended from 93 09 01 to 93 12 31. There were 208 officers trained during this period. Using a formula, an equivalent of 181 officers were trained for the whole period (4 months).

## RATIONALE FOR TEST PERIOD

1. TO DETERMINE THE EFFECTIVENESS OF THE PRODUCT.
2. TO ENSURE PROPER TRAINING STANDARDS FOR THE REMAINDER OF THE DEPARTMENT.
3. TO ENSURE PROPER USE.

## USAGE

There were a total of 78 uses of the OC. In 1992, the RCMP tested the product in Surrey and Prince George B.C. and a small detachment in the NWT. It was tested for three months and they had 141 uses during that period of time. Therefore, the incidence of use in the Winnipeg Police test period appears reasonable.

The use of the product escalated dramatically in December as can be seen by the following chart:

MONTH	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
COUNT BY MONTH	9	19	8	42

**EFFECTIVENESS - Overall**

The product has demonstrated that it is effective in temporarily disabling individuals. The following table illustrates the rating of the OC product:

EFFECTIVENESS RATING	EXCELLENT	GOOD	POOR	NOT EFFECTIVE
COUNT BY EFFECTIVENESS	55	16	3	4
PERCENTAGE	70%	21%	4%	5%

Each rating may be defined as follows:

EXCELLENT - worked very well.  
 GOOD - worked well.\*  
 POOR - impaired the individuals vision but they were still able to struggle.  
 NOT EFFECTIVE - did not work at all.

\* In a review of the data, it is difficult to differentiate between the first two and the differences may be subjective to the officer spraying.

Based on the rating, if the first two categories are used, the product is 91% successful. This falls within acceptable standards for the product. Most of the literature states that the product should experience a 90% success rate.

Based upon the comments of the officers who participated in the experiment, this product has received a high degree of support. Comments and a description of the incidents may be found in Appendix 1.

**OUTDOOR EFFECTIVENESS**

There were **22** occurrences of the use of the spray in out door weather. The effectiveness can be seen in the following table:

OUTDOOR EFFECTIVENESS RATING	COUNT
EXCELLENT	14
GOOD	5
POOR	1
NOT EFFECTIVE	2

The overall effectiveness at 86% is slightly diminished from the indoor effectiveness which is 93%. The temperatures range from 10 deg c. to -28 deg c. The temperatures where it was not effective were 4 deg c with a 14 km/h wind and -17 deg c with a 5 km/h wind. The temperature for the poor rating was 10 deg C with no wind.

The most extreme cases where it worked were:

1. -28 deg C. with a 40 KM/H wind and at a distance of 6' with light precipitation / rated at good.
1. -2 DEG c. with a 60 KM/H wind and at a distance of 2' with light precipitation / rated at good.

In the first case, only the individual's vision was initially impaired by the spray. This however allowed the officers to handcuff the individual and get him into the patrol vehicle. Once in the patrol vehicle, the full effect of the spray took hold.

## PROPER USE

A review of all the descriptions of the incidents was conducted to determine if the product was being used in a proper fashion. A major proportion of the descriptions were satisfactory in explaining that the product was used appropriately.

Sergeant R. Lahaie of the Training Division wrote a report which indicates that the remaining forms did not properly explain the use of the product. In order to address this issue, the Case Reports of these incidents were reviewed in detail. This review, conducted by Inspector Walker, determined that all remaining sprays were used correctly. See Appendix 2 for details.

### EXCELLENT EXAMPLES:

1. A male armed with a steak knife attacked the police. The officer used the spray at a distance of eight feet which instantly disabled the individual. The officers commented that deadly force (shooting) was the only other option.
2. A female fighting officers, she scratched a female officer in the process. The officers temporarily had the female restrained but she broke free. In order to prevent further injury, they the officers sprayed the female.
3. A male was threatening suicide with a butcher knife. He began swinging the knife at the officers. Within five seconds of spraying the male, he was incapacitated and handcuffed, thus preventing injury to both himself and the officers.

## SAFETY

A major concern for the Department is that the product is safe for both the Officer and the person to be sprayed.

There were five cases where person sprayed were taken for medical treatment, however, only two where the spray was the cause. In both cases, the individuals were treated successfully by giving the individuals eye washes.

The other injuries included an individual who was treated for an injury inflicted by his wife; an abrasion received when falling and an individual who was treated when he became exhausted during his altercation with police. He was asmatic and it was deemed prudent to take him to the hospital.

Also of concern and which is related is the cross contamination which can occur. The scale used for this can be seen in the following table (in order of rising severity);

### CROSS CONTAMINATION FOR PARTNER OR BYSTANDERS

DEGREE OF SEVERITY	NONE	VERY LITTLE	MODERATE	SEVERE- CAN STILL FUNCTION	INCAPACITATED
COUNT BY SEVERITY	34	25	18	1	0

The one case of severe contamination occurred when an officer accidentally sprayed his partner. She was still able to function though after the spray.

In only 24% of the cases was there any sort of cross contamination that was moderate or greater. This would appear to be reasonable. Moderate contamination generally gave 'some scratchiness in the throat but caused no problems. Ten or 53% of moderate contaminations occurred three feet or closer. This may indicate that the situations were in close quarters.

### CROSS CONTAMINATION FOR INDIVIDUAL USING TEE SPRAY.

DEGREE OF SEVERITY	NONE	VERY LITTLE	MODERATE	SEVERE - CAN STILL E-UNCTION	INCAPACITATED
COUNT BY SEVERITY	37	22	19	0	0

Again the cross contamination was only 24%. Part of this could be explained by the close proximity to the person being sprayed. Eleven or 58% of these sprays occurred 3 feet or closer.



**DEMOGRAPHICS (See Appendix 3 for detailed Demographics)**

There was a total of **66** males with an average age of **30** years, weighing an average of **186 lbs.** (84.3 kg) and standing 70.3" tall (179 cm.). There was a total of 12 females with an average age of 28.6 years, weighing 185 lbs. (83.9 kg) and standing 65.4" tall (166 cm.).

**DISTANCE OF SPRAY (Chart #1 in Appendix 4)**

This depicts the distances that the spray was used. Thirty-six or 46% of the sprays occurred three feet or closer to the person sprayed. In fact, 14 or 18% occurred two feet or closer. This is of concern. The pressure exerted by the spray could cause damage to the eyes of the person sprayed. As a safety precaution the RCMP indicate that no one should be sprayed within the three foot range. Also a great deal of cross contamination occurs at close range. When officers are trained, additional emphasis should be placed upon this portion of the training.

**TIME OF DAY**

A very specific pattern occurred in the time of day where the spray was used as can be seen by the following chart:

TIME OF DAY	20:00 to 04:00	04:00 to 12:00	12:00 to 20:00
COUNT	41	17	20
PERCENTAGE OF SPRAYS	52%	22%	26%
% CALLS IN TIME FRAME	41%	22%	37%

The first period, 20:00 to 04:00, is the busiest time of day for the patrol units as depicted in the section marked % CALLS (for service). However, it still has a disproportionately higher percentage of sprays than the calls would indicate.

**INCAPACITATION TIME (Appendix 4 - Chart II)**

Incapacitation time is the time it takes to render the person sprayed to be deemed safe. Fifty-six or 79% of the people sprayed, where the spray worked well had the effect occur in ten seconds or less. Sixty-eight or 96% occurred in one minute or less.

**TIME TO APPROACH SUBJECT (Appendix 4 - Chart III)**

Relates to the time required for an officer to approach the sprayed subject. Fifty-seven or **76%** of the people sprayed had the effect occur in ten seconds or less. Seventy-one or **95%** occurred in one minute or less.

**CONDITION OF PERSON SPRAYED (Appendix 4 - Chart IV)**

This refers to what state the person was in at the time. Forty-eight or **62%** of the people were under the influence of alcohol. Eleven or **14%** were under the influence of drugs. Four or **5%** were mentally impaired. It was found that OC did not work well with any individual who was mentally impaired. Fifteen or **19%** were classified as being normal as far as their state was concerned.

**BEHAVIOUR OF THE PERSON SPRAYED (Appendix 4 - Chart V)**

There were three categories listed, which are Violent, Aggressive and Passive. Twenty-eight or **36%** of the persons sprayed were deemed by the officers as violent. On two occasions the spray was not effective.

Forty-nine or **63%** of the time the individuals were aggressive towards the police (ie. threatening to fight the officer with fists up). Twice the product was not effective and on three occasions it worked poorly.

On one occasion an individual was passive. The individual was hiding under a stair well in a break and enter and refused to come out. Ultimately for the safety of all concerned they sprayed the individual. As it turned out the individual sprayed had a record for violence.

**USAGE BY PLATOON (Appendix 4 - Chart VI)**

Chart VI indicates that the "A1" and "A2" shifts use the spray more so than the other shifts. Indeed, **62%** of all the sprays came from those two shifts. Of note, however, is that the officer who trained the Division is on one shift and a Sergeant in the Crowd Control Unit, who is a leading proponent of the product, is on the other shift. Some of their enthusiasm for the product invariably rubbed off on their shifts.

It should be pointed out, however, that one officer on the "A2" shift used the spray on 12 individuals on 8 separate occasions during the test period. All of those tests seemed appropriate though.

## USAGE BY SENIORITY (Appendix 4 - Chart VII)

Although 48% of Division #11 personnel have ten years service or less, their percentage of usage was 74%. This is almost three times as much as the more senior personnel. Naturally, some of the more senior personnel will have station functions or be NCO ranks. Still the 74% number appears rather high. There were no uses of the product by an NCO.

## HOLSTERS

The majority of the holsters issued were leather. There were only two poor ratings on the leather holsters. There were seven comments that the snaps were hard to do up. There was some mention that the holster was difficult to use with gloves on.

There were seven uses where the officers had velcro holsters. They were all rated as excellent.

## RATE OF RECOVERY

Most of the literature indicates that an individual will fully recover within one hour after being sprayed. There were only four incidents where the effects were longer. Two lasted 90 minutes, one 80 minutes and one seventy-five minutes.

## TRAINING

A review of the Training was conducted by S/Sgt. Kehler, Sgt. I Pratt & Cst. Bertouille. The following results were noted:

1. Overall, the officers were positive towards this training.
2. Fifty percent of the individuals were exposed to the OC. Many individuals expressed concern over the "communal tub" for decontamination, citing possible health hazards from the mucous in the water.

This is a valid concern on the part of participants. With modern day knowledge on the transmission of diseases, individual cleansed cleaning tubs must be provided to protect the officers being trained.

3. Individuals expressed concern that additional training should be offered in training officers methods to protect themselves from being personally sprayed.

4. They indicate that the lesson plan should include guidelines in documenting OC use in reports and notes emphasizing detail and justification of its use.

## SUMMARY

### **EFFECTIVENESS**

The Def Tec product proved to be effective with a **91%** success rate. The officer's comments would indicate that they wholeheartedly approve of the product and feel that it would enhance the safety of officers on the street.

### **PROPER USAGE**

From a review of the forms and with additional review of the actual reports submitted, it would appear that the spray was used appropriately.

### **TRAINING STANDARDS**

The training of officers in the product appears sufficient with the exception that greater emphasis is required in training officers not to use the product when they are closer than three feet to the subject and those concerns mentioned in the TRAINING section of this report.

### **OTHER COMMENTS**

After reviewing the forms, it became apparent that there is value in having an overall Use of Force Form which would assist the Department in determining the training needs of the Department. They could be used to:

1. Ensure the appropriate level of force was used.
2. Ensure the integrity of our training.
3. Determine if any member appeared to be more involved than would appear normal so that remedial training could be implemented.

4. Document examples where the proper use of the product invariably saved the Department from expensive litigation.

Sgt. Lahaie's has recommended a Use of Force Coordinator. Currently, training in the various uses of force appears to be piecemeal and a more holistic approach is required.

## **RECOMMENDATIONS**

1. That the remainder of the Police Department be supplied with the Def Tec OC product as outlined in Appendix "%".
2. That Velcro Holsters be ordered for the remainder of the Department.
3.
  - a. During the training, additional emphasis should be placed on spraying three feet away or further. The dangers of cross contamination for the officer and possible injury on the person sprayed should be highlighted.
  - b. That better decontamination procedures be implemented.
  - c. Additional training be provided in documenting the justification for the use of force in both reports and notes.
  - d. Training be offered in defensive tactics for when officers are confronted with individuals who possess the OC spray.
4. That a Use of Force Form be developed for use by our Department.
5. That a review of the need for a Use of Force Coordinator be considered.

APPENDIX 1

INCIDENT #	DESCRIPTION	COMMENTS
93/1/039436	MALE ON HEROIN, CANADA WIDE WARRANT, RESISTED ARREST, ASSISTED BY VICE	TAKEN TO HSC, BREATHING STABILIZED. CAUSED BY EXERTION, NOT OC. OC WORKED WELL, LOSS OF VISION & DISCOMFORT. STILL FOUGHT. HAD TO BE PHYSICALLY SUBDUED. MALE GOAL ORIENTED
93/1/077749	WANTED ON A WARRANT. TOOK UP FIGHTING STANCE, CLENCHED FISTS AND REFUSED TO COME,	WORKED WELL
93/1/183549	ARRESTED FOR CAUSE DISTURBANCE	MENTALLY UNSTABLE INDIVIDUAL, 2.5 MINUTES TO CAUSE PASSIVE
93/1/184267	AFTER A CHASE, MALE KNOCKED OFFICER OVER WITH DOOR OF CC. PARTNER SPRAYED HIM	NONE
93/1/184354	OCTOBERFEST, PUSHING MATCH, MALE ARRESTED IPDA (intoxicated), RESISTED ARREST	SPRAYED WITHIN 2 FEET OF ACCUSED, RECOVERY TIME OFFICER - 5 MIN., OTHER OFFICER ALSO SPRAYED HIM.
93/1/192138	MALE UNDER STAIRWELL FROM B & E, REFUSED TO COME OUT, REPEATEDLY TOLD TO COME OUT. WHEN REFUSED SPRAYED TO PREVENT INJURY	SUBJECT RECORD FOR VIOLENCE, COMPLIED WITH ALL COMMANDS AFTER SPRAY
93/1/196767	KICKED OFFICER INGROIN AND BIT ANOTHER ON THE WRIST. FEMALE OFFICER SPRAYED SUBJECT	SUPERIOR TO PHYSICAL FORCE, PREVENTED INJURY
93/1/197969	ATTEMPTED TO KICK POLICE	CLOSED YES, HAD TO GIVE UP
93/1/198797	MALE VIOLENT AND PUNCHED OFFICEER IN THE FACE	PSYCHOLOGICAL PROBLEMS, IT DID NOT WORK
93/1/198942	MALE AGGRESSIVE, ATTEMPTED TO KICK OFFICER ALONE WITH TWO MALES	PREVENTED INJURY

INCIDENT #	DESCRIPTION	COMMENTS
93/1/202574	ACCUSED WAS VIOLENT FOR THE FOURTH TIME IN THE BOOKING AREA OF 175 MARTHA. KICKED AND SMASHED.	NONE
93/1/205316	SMASHED FISTS & HEAD INSIDE THE CC; LATER TAKEN INTO PSB, WENT OUT OF CONTROL AND WAS SPRAYED BY A DIFFERENT OFFICER IN THE BACK SEAT OF THE CAR.	FIRST TIME POOR, SECOND TIME GOOD
93/1/205443	FEMALE WAS FIGHTING WITH OFFICERS, FEMALE OFFICER WAS SCRATCHED IN THE FACE. SHE WAS RESTRAINED BUT BROKE FREE AND ATTEMPTED TO FIGHT OFFICERS AGAIN, THEN SHE GOT SPRAYED.	PREVENTED FURTHER INJURY TO THE OFFICERS
93/1/205613	FOUND THREE MALES AT A BREAK IN, BECAME VIOLENT, ALL THREE SPRAYED.	IMMEDIATE INCAPACITATION
93/1/205613	THREE MALES FOUND IN BREAK & ENTER, STARTED TO FIGHT WITH POLICE.	ONCE SPRAYED SUBJECT WAS UNDEER CONTROL
93/1/205613	THREE MALES IN A BREAK IN, BECAME VIOLENT	SUBJECT CONTROLLED IMMEDIATELY
93/1/211170	MALE THREATENED TO SHOOT SELF. BECAME VIOLENT AND STARTED TO SWING FISTS.	REQUIRED SIX POLICE OFFICERS TO HANDCUFF BUT HE WAS BLINDED WHICH HELPED.
93/1/211515	ATTEMPTED TO PULL MALE FROM CAR, STARTED TO FIGHT.	FOUGHT EVEN WHEN HE GOT BACK TO STATION, HAD TO BE HANDCUFFED.
93/1/211881	MALE STARTED TO FIGHT POLICE, HIT WITH SPRAY, ATTEMPTED TO FLEE, GIVEN ANOTHER SHOT	NONE
93/1/212058	FOUND MALE URINATING ON MAIN ST. OFFICE. MALE RESISTED ARREST. PUSHED WRITER SEVERAL TIMES.	AWESOME



INCIDENT #	DESCRIPTION	COMMENTS
93/1/212787	DOMESTIC ASSAULT. MALE BECAME RESISTANT TO ARREST AND FOUGHT POLICE.	NONE
93/1/217613	MALE ATTEMPTED TO BREAK THROUGH POLICE LINE IN BLUE JAY CELEBRATION, BECAME VIOLENT	NONE
93/1/217655	SEVERAL PEOPLE FIGHTING. SPRAYED TO STOP	VIOLENT & PASSIVE AFTER SPRAY
93/1/219267	HANDCUFFED IN CC, BEGAN KICKING THE WINDOW AND BANGING HIS HEAD.	VERY VIOLENT SITUATION WHICH WAS DIFFUSED WITH THE HELP OF THE PRODUCT. DEADLY FORCE WAS THE ONLY OTHER OPTION.
93/1/219381	ARMED WITH STEAK KNIFE. LOCKED IN HOUSE. ATTACKED POLICE.	NONE
93/1/220032	OBSERVED TWO MALES FIGHTING ON STREET. MALE WOULD NOT STOP FIGHTING.	NONE
93/1/222842	SMASHED A WINDOW, FOUND IN BEVERAGE ROOM, STARTED TO FIGHT IN ROOM.	VERY EFFECTIVE, CUT THE FIGHT IN HALF OR LESS
93/1/228889	DOMESTIC DISPUTE. SUBJECT AWOKE BY OFFICERS & CAME OUT FIGHTING. HE FLAILED WILDLY. SUBJECT FELL TO GROUND WITH OFFICER. LOST CONTROL OF INDIVIDUAL	NONE
93/1/232706	MALE WANTED FOR WARRANTS, WENT INTO FIGHTING STANCE, WAS 9902, SPRAYED TO STOP FIGHT.	NONE
93/1/233847	INTOXICATED, BANGING ON WINDOWS - FOUGHT WITH POLICE	MALE KNOWN DRUG USER & DEALER. MALE VERY MUSCULAR, NO INJURIES TO ANYONE

INCIDENT #	DESCRIPTION	COMMENTS
93/1/237822	IMPAIRED - BANGED HEAD ON SHIELD, KICKED SHIELD ATTEMPTING TO INJURE SELF, SPRAYED TO STOP INJURY	RECOVERE ON OWN, CONTINUED TO BAG HEAD AT PSB
93/1/242844	MALE ATTEMPTED TO REMOVE PERSON FROM PREMISE	NO EFFECT
93/1/243452	MALE CAUSED DISTURBANCE, RAN FROM POLICE, TURNED INTO FIGHTING STANCE, THEN SPRAYED	MALE INTOXICATED AND SLOW TO REACT, UNABLE TO SEE IMMEDIATELY
93/1/244654	DOMESTIC - MALE ARMED SELF WITH SCREW DRIVER. MALE SPRAYED AND DISARMED WITHOUT INJURY	WORKED GREAT, SAVED WRITER FROM INJURY
93/1/245446	ATTEMPTING TO ARREST HER IN A DOMESTIC CASE	FEMALE NEVER INCAPACITATED, KEPT FIGHTING
93/1/245446	DOMESTIC, THIS FEMALE ATTEMPT TO EXTRICATE ANOTHER FEMALE FROM ARREST	NONE
93/1/245446	MALE ATTACKED WHEN THE OFFICER ATTEMPTED TO ARREST A FEMALE IN A DOMESTIC ASSAULT	NONE
93/1/246724	FIGHTING IN BAR, TRIED TO KICK OFFICER	WORKED INSTANTLY
93/1/246950	ARRESTED BROTHER OF FEMALE, FEMALE BECAME AGITATED AND BECAME VIOLENT, PUSHING POLICE	WORKED WELL, PREVENTED A FIGHT
93/1/246950	MALE ARRESTED FOR DOMESTIC ASSAULTS, STARTED TO SWING AT OFFICERS, USED SPRAY.	STOPPED SWINGING ARMS & CLOSED EYES. STILL STRUGGLED WITH OFFICERS

INCIDENT #	DESCRIPTION	COMMENTS
93/1/246950	MALE ATTEMPTED TO PREVENT AN ARREST, THEREFORE HE WAS ARRESTED	WORKED WELL AS THERE WOULD HAVE BEEN A LARGE FIGHT, AS BACKUP HAD NOT ARRIVED
93/1/247892	MALE STARTED TO FIGHT WITH A POLICE OFFICER, SPRAYED SAME	NONE
93/1/250389	BECAME BELIGERANT DURING AN ARREST, BEGAN PUSHING OFFICERS, HE TORE A SHOULDER FLASH OFF AN OFFICER, THE SPRAY WAS USED	WORKED VERY VERY WELL, CROWD FORMING, WAS ABLE TO GET OUT
93/1/251324	ARRESTED FOR DOMESTIC ASSAULT. CLENCHED FISTS AT POLICE, THEN SPRAYED	NONE
93/1/251525	WENT TO REAPPLY HANDCUFFS, MALE BECAME AGRESSIVE & THEY SPRAYED	NONE
93/1/253063	MALE SMASHED GLASS ON FLOOR - SPRAYED TO AVOID CONFRONTATION	STOPPED EXPLOSIVE SITUATION
93/1/254679	EXECUTING MENTAL WARRANT, SPRAYED FOUR TIMES AFTER BECOMING VIOLENT	NOT EFFECTIVE
93/1/255100	TRIED TO PLACE ACCUSED IN INTERVIEW ROOM, ATTACKED CONSTABLE.	PREVENTED INJURIES
93/1/255356	WAS TO BE DETAINED IPDA - BECAME VIOLENT	NONE
93/1/256503	DOMESTIC - ATTEMPTING TO KICK SON OUT.	BECAME AGGRESSIVE TO POLICE

INCIDENT #	DESCRIPTION	COMMENTS
93/1/256845	ATTEMPTED TO KICK OFFICER WHILE HANDCUFFED	CALMED IPDA DOWN
93/1/257123	FOUR PEOPLE FIGHTING WITH KNIVES, MALE ARRESTED AND STARTED TO FIGHT WITH POLICE.	10 PEOPLE IN SUITE WHO WOULD HAVE FOUGHT, SAT DOWN AFTER SPRAY
93/1/257123	FOUR PEOPLE FIGHTING, FEMALE ATTEMPTED TO PULL ARRESTED MALE AWAY FROM POLICE, SHE USED FISTS & THEN SPRAYED.	10 PEOPLE IN SUITE WHO WOULD HVE FOUGHT, SAT DOWN AFTER SPRAY
93/1/257208	DOMESTIC - WHILE ARRESTING MALE - FEMALE THEN ATTACKED POLICE	UNABLE TO SEE, BECAME IRATE, BUT ABLE TO SUBDUE
93/1/259251	EFFECTED ARREST, UNKNOWN IF SUSPECT STILL HAD KNIFE, LASHED AT OFFICERS. SPRAYED TO CONTROL SUBJECT	PREVENTED INJURY
93/1/259315	STARTED TO KICK OFFICERS	PREVENTED INJURY
93/1/259315	VIOLENT - KICKING & SCREAMING.	PREVENTED INJURY
93/1/259636	DOMESTIC - THREE PEOPLE FIGHTING, SPRAYED TWO COMBATANTS	NONE
93/1/259636	DOMESTIC ASSAULT, THREE PEOPLE ASSAULTED	NONE
93/1/259905	MALE ASSAULTED OFFICERS	DID NOT COMPLETELY STOP PERSON, BUT SLOWED HIM DOWN ENOUGH TO GAIN CONTROL

INCIDENT #	DESCRIPTION	COMMENTS
93/1/259982	DISTURBANCE, MALE AGGRESSIVE, ORIGINAL CALL, MALE WITH KNIFE	NONE
93/1/260143	ESCORTED FROM HOSPITAL, BECAME VIOLENT	BETTER THEN IMPACT WEAPON
93/1/260592	ATTEMPTED TO STRUGGLE WITH POLICE	NOT EFFECTIVE
93/1/260985	DOMESTIC, MALE GRABBED COMPLAINANT IN FRONT OF OFFICERS, FOUGHT OFFICERS, USED SPRAY	NONE
93/1/261680	MALE THREATENED SUICIDE, BECAME VIOLENT WITH OFFICERS IN POLICE ROOM AT HSC	STOPPED FIGHT AND INJURY
93/1/262647	THREATENED SUICIDE, HAD A BROKEN JAGGED COFFEE MUG, PUT IT TO HIS THROAT, SPRAYED TO SAVE LIFE	VERY EFFECTIVE TO DISSARM SUBJECT & PREVENT DANGEROUS SITUATION
93/1/262661	CHALLENGED POLICE TO FIGHT.	NONE
93/1/263622	ARRESTING MALE FOR ASSAULT WITH WEAPON, WANTED TO FIGHT POLICE	NONE
93/1/263927	BAILED OUT OF STOLEN CAR, CHALLENGED POLICE TO FIGHT, SPRAYED	SPRAY BLINDED HIM TEMPORARILY, PREVENTING ESCAPE.
93/1/266225	ASSAULTED OFFICERS WITH TWO OTHER MALES	PREVENTED SERIOUS INJURY TO OFFICERS

INCIDENT #/	DESCRIPTION	COMMENTS
93/1/266330	PUSHED & SCREAMED AT OFFICERS	NONE
93/2/237458	POINTED SAWED OFF SHOT GUN - CHASED ON FOOT. STRUGGLED ON APPREHENSION & SUBDUED BY SPRAY.	NONE
93/3/219307	ARRESTED FOR ACBH, RESISTED ARREST. REFUSED HANDCUFFS, SWUNG HIS ARMS.	ONCE SPRAYED INCAPACITATED, NO INJURY
93/3/257679	HIGH SPEED CHASE, CUAGHT, FOUGHT TO ESCAPE, SPRAYED.	WORKED GREAT, PREVENTED MALE FROM ESCAPING
93/3/258484	DOMESTIC, WHILE ARRESTING, FOUGHT POLICE	NONE
93/5/220497	DOMESTIC ASSAULT. TOLD UNDER ARREST. ATTEMPTED TO LEAVE, TRIED TO PUNCH & KICK OFFICERS.	VERY EFFECTIVE, PREVENTED LENGTHY STRUGGLE

APPENDIX 2

## ASSESSMENT OF APPROPRIATE USE OF FORCE

The writer obtained copies of reports written on each occasion the O/C spray was used by members during the product assessment phase. I am satisfied that the application of the O/C spray was justified in every case.

An issue that is apparent is the number of times O/C spray is used on aggressive persons and these individuals are then detained under the provisions of the Intoxicated Persons Detention Act. On examining the comments in the Call Histories relating to these incidents the use of O/C spray was justified, however the individuals involved could have been charged with a Criminal Offence such as Cause a Disturbance, Obstruct a Peace Officer and/or Assault a Peace Officer. This may be occurring for matters of expediency. This issue can be addressed by means of a Routine Order emphasising the intent of the 'Intoxicated Persons Detention Act. Subsequent instructions should be issued, that persons committing a criminal offence that would lead them to be sprayed with O/C, should be so charged.

Sergeant 11 R. Lahaie has submitted a report to Sergeant 1 D. Williams and myself stating his belief that the Department should adopt a 'Use of Force Form' to better document the level of force used against members and to justify the members response. This suggestion was in part made after he reviewed the forms developed by Research and Planning to monitor the O/C spray usages. He did not examine the police reports submitted. These forms did not provide for a detailed response relating the incident but were meant to provide statistical data, which they did.

It is my opinion that Sergeant Lahaie's suggestion be taken under advisement apart and separate from this Analysis and should be submitted to the Executive as a change in policy and training.

I reiterate my endorsement of the Department obtaining and training all operational members of Department in O/C spray.



**APPENDIX 3**

## DEMOGRAPHICS

MALE AGE	COUNT	FEMALE AGE	COUNT
14	1	16	2
15	1	23	2
17	1	24	1
18	3	26	1
20	1	31	1
21	2	33	1
22	3	35	2
23	1	36	1
24	2	45	1
25	6	<b>AVERAGE AGE</b>	<b>28.6</b>
26	3		
27	2		
28	2		
29	6		
30	3		
31	4		
32	3		
33	3		
34	1		
35	2		
36	2		
37	3		
38	1		
39	2		
40	1		
41	2		
43	1		
44	1		
47	2		
55	1		
<b>AVERAGE AGE</b>	<b>30</b>		

<b>FEMALE RANGE</b>	<b>&lt; 20 = 2</b>
	<b>20 - 29 = 4</b>
	<b>30 - 39 = 5</b>
<b>TOTAL = 12</b>	<b>&gt; 40 = 1</b>

<b>MALE RANGE</b>	<b>&lt; 20 = 6</b>
	<b>20 - 29 = 28</b>
	<b>30 - 39 = 24</b>
	<b>40 - 49 = 7</b>
<b>TOTAL = 66</b>	<b>&gt; 50 = 1</b>

## HEIGHT

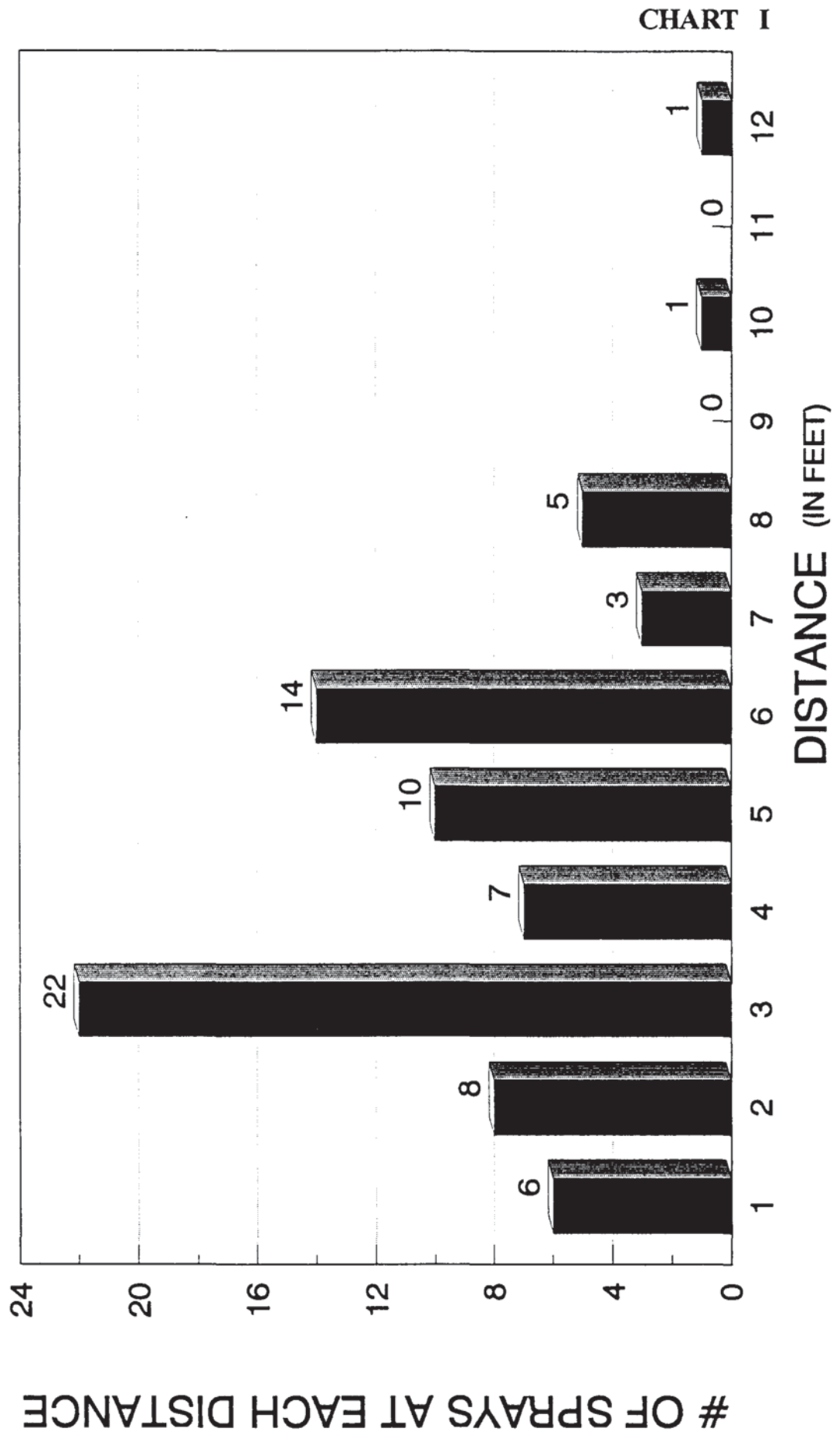
MALE COUNT AT EACH HEIGHT	HEIGHT IN METRIC (CM)	HEIGHT IN IMPERIAL (INCHES)	FEMALE COUNT AT EACH HEIGHT
0	155	61	1
0	157	62	1
0	160	63	1
2	163	64	3
2	165	65	2
2	168	66	1
3	170	67	1
6	173	68	0
7	175	69	0
17	178	70	1
7	180	71	0
6	183	72	0
5	185	73	0
3	188	74	1
4	191	75	0
2	193	76	0
<b>AVERAGE HEIGHT</b>	179 cm or 70.3"	<b>AVERAGE HEIGHT</b>	166 cm or 65.4"

## WEIGHT RANGES

MALE COUNT AT EACH WEIGHT RANGE	WEIGHT IN METRIC (KG)	WEIGHT IN IMPERIAL (LBS)	FEMALE COUNT AT EACH WEIGHT
0	45 - 54	100 - 119	1
3	55 - 63	120 - 139	1
7	64 - 72	140 - 159	3
18	72 - 81	160 - 179	2
15	82 - 90	180 - 199	1
9	91 - 99	200 - 219	3
10	100 - 108	220 - 239	1
4	109 - 117	240 - 259	0
<b>AVERAGE WEIGHT</b>	<b>84.3 kg or 186 lbs</b>	<b>AVERAGE WEIGHT</b>	<b>83.9 kg or 185 lbs</b>

APPENDIX 4

# DISTANCE SPRAY TRAVELLED



# TIME TO INCAPACITATE THE INDIVIDUAL

(IN SECONDS)

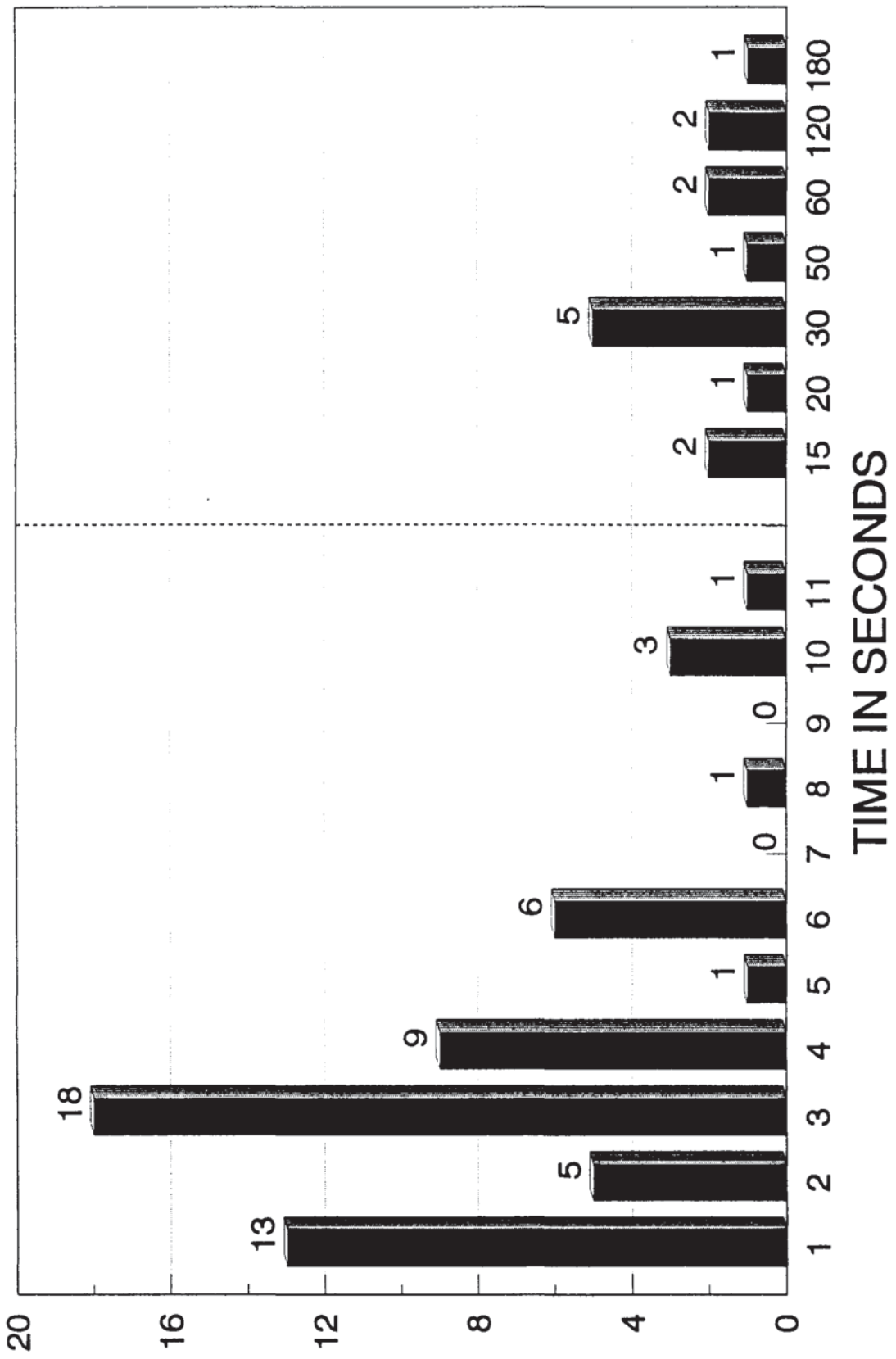


CHART II

COUNT OF INSTANCES AT EACH TIME FRAME

# TIME TO APPROACH THE SUBJECT (IN SECONDS)

COUNT OF INSTANCES AT EACH TIME FRAME

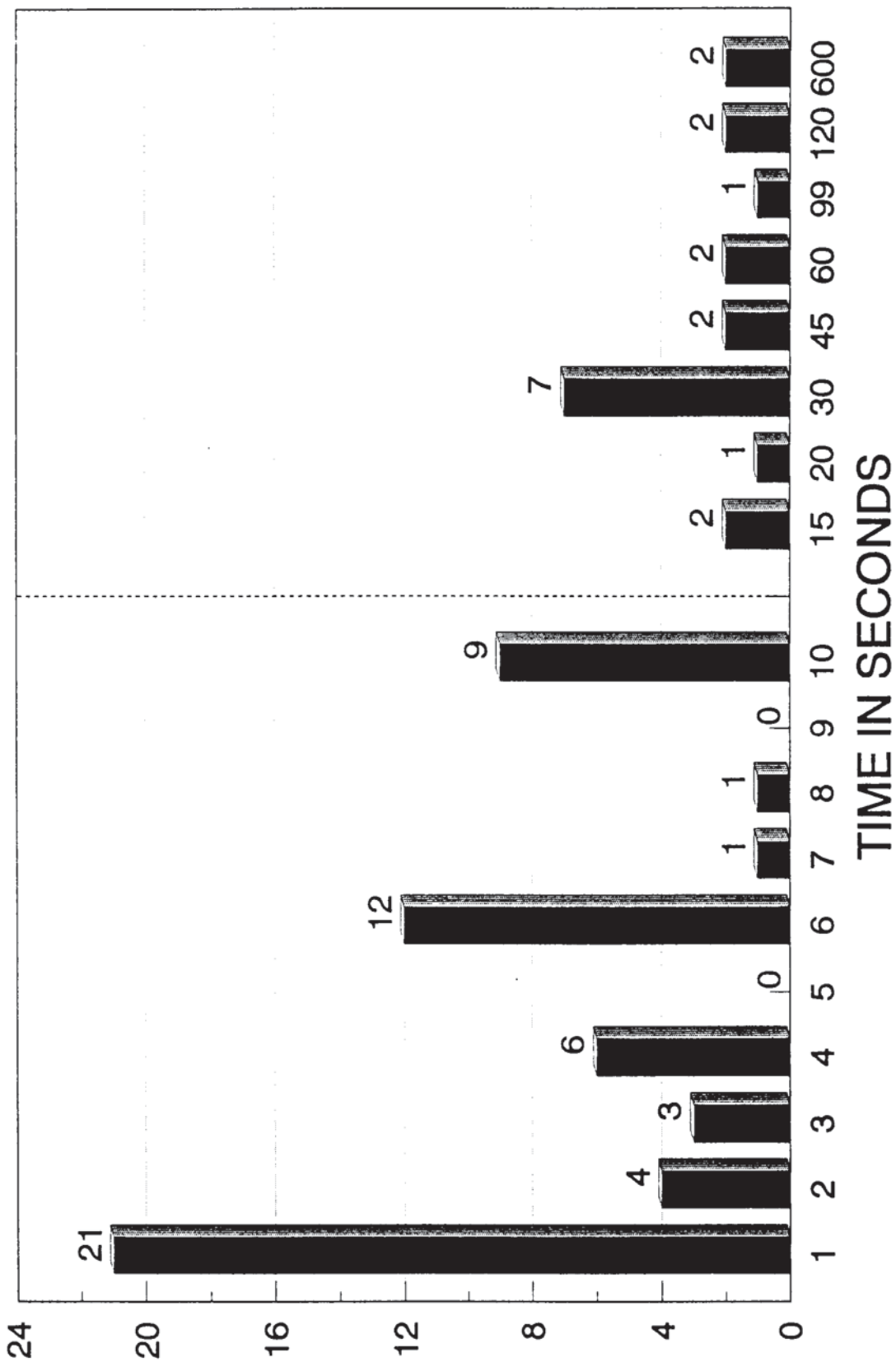


CHART III



# CONDITION OF PERSON SPRAYED

## & EFFECTIVENESS

OVERALL EFFECTIVENESS IS 91%.

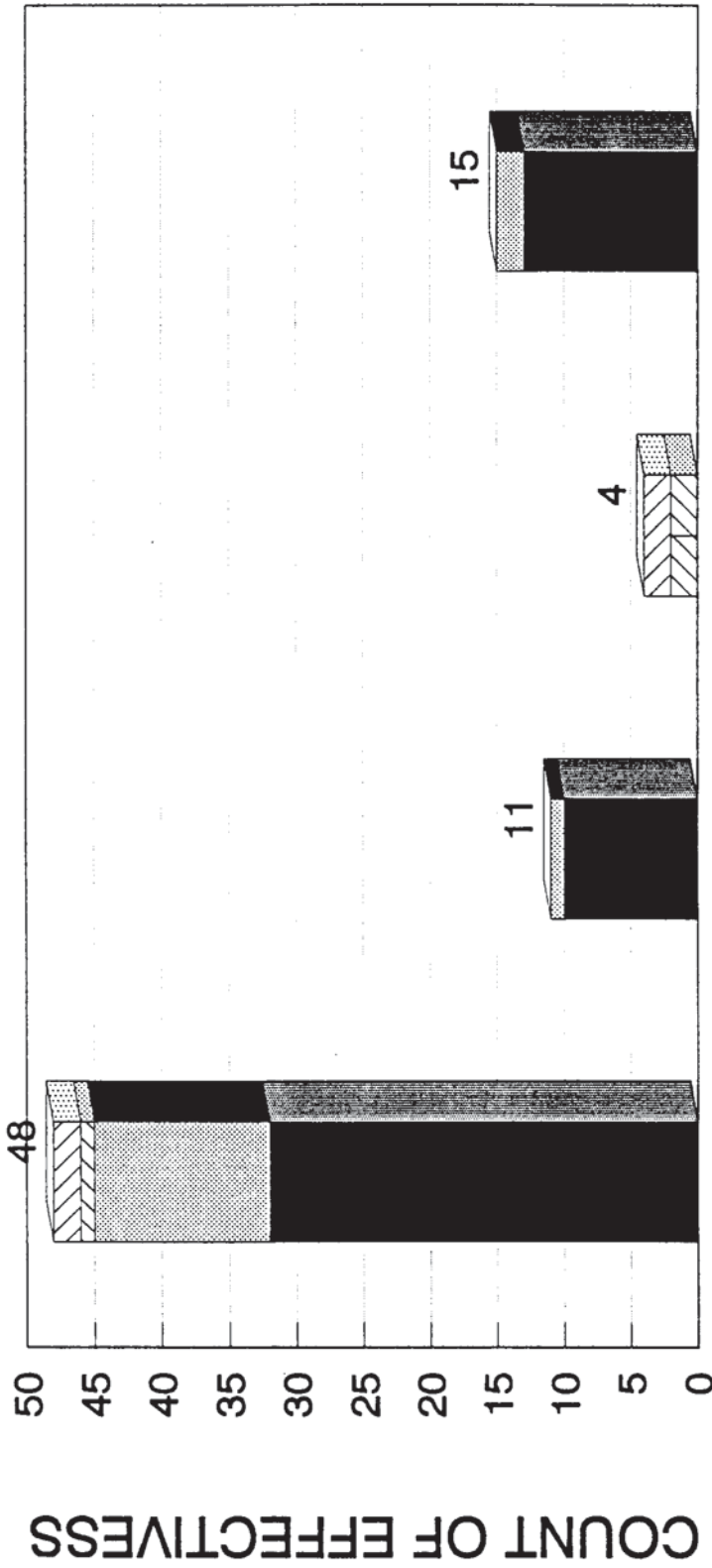


CHART IV

CONDITION	ALCOHOL	DRUGS	MENTAL	NORMAL
EXCELLENT	32	10	0	13
GOOD	13	1	0	2
POOR	1	0	2	0
NOT EFFECTIVE	2	0	2	0

# BEHAVIOUR OF PERSON SPRAYED

## & EFFECTIVENESS

TOTAL # OF SPRAYS = 78 / OVERALL EFFECTIVENESS IS 91%.

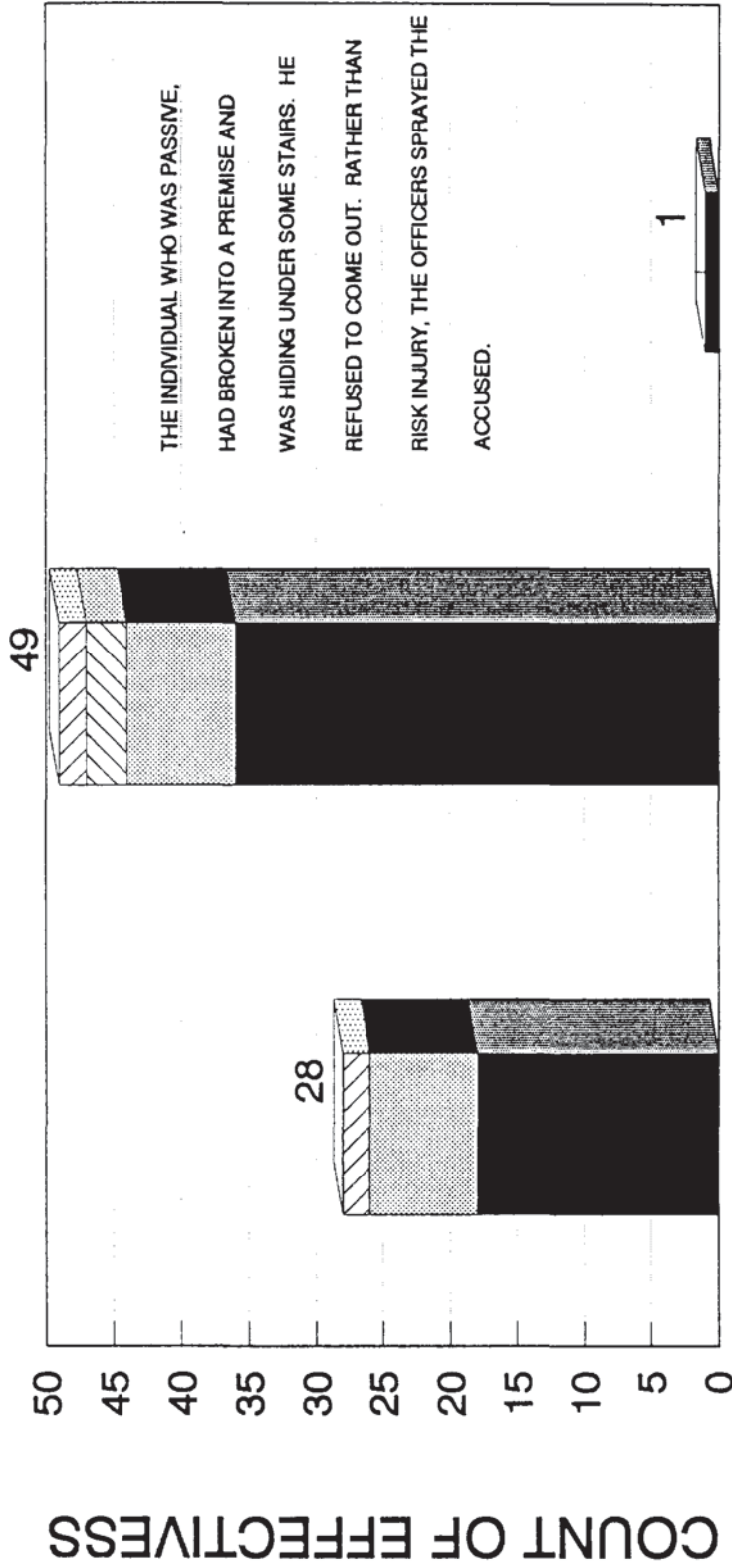
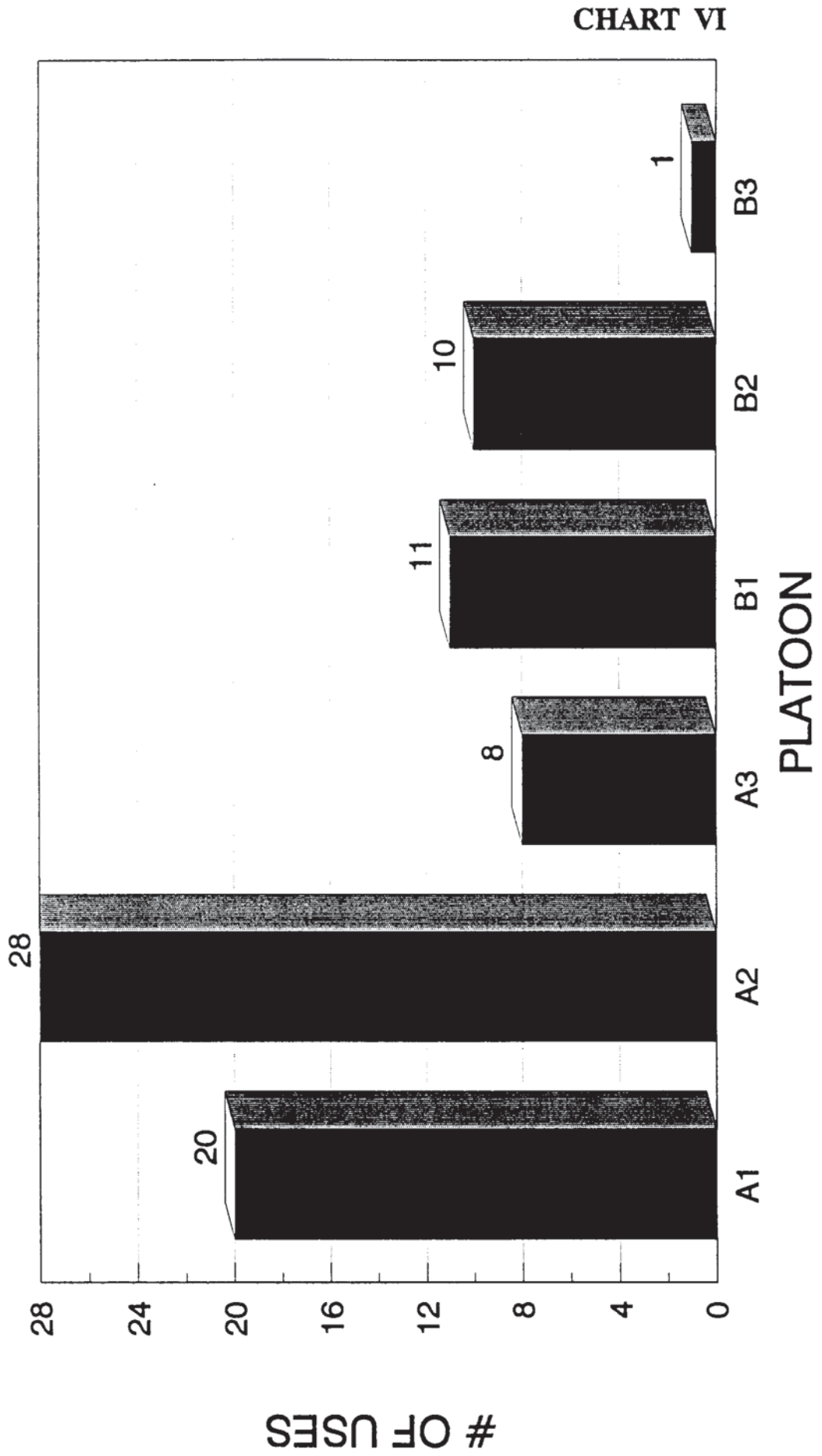


CHART V

BEHAVIOUR	VIOLENT	AGGRESSIVE	PASSIVE
EXCELLENT	18	36	1
GOOD	8	8	0
POOR	0	3	0
NOT EFFECTIVE	2	2	0

# USAGE BY PLATOON

TOTAL # OF PLATOONS = 6



# USAGE BY SENIORITY

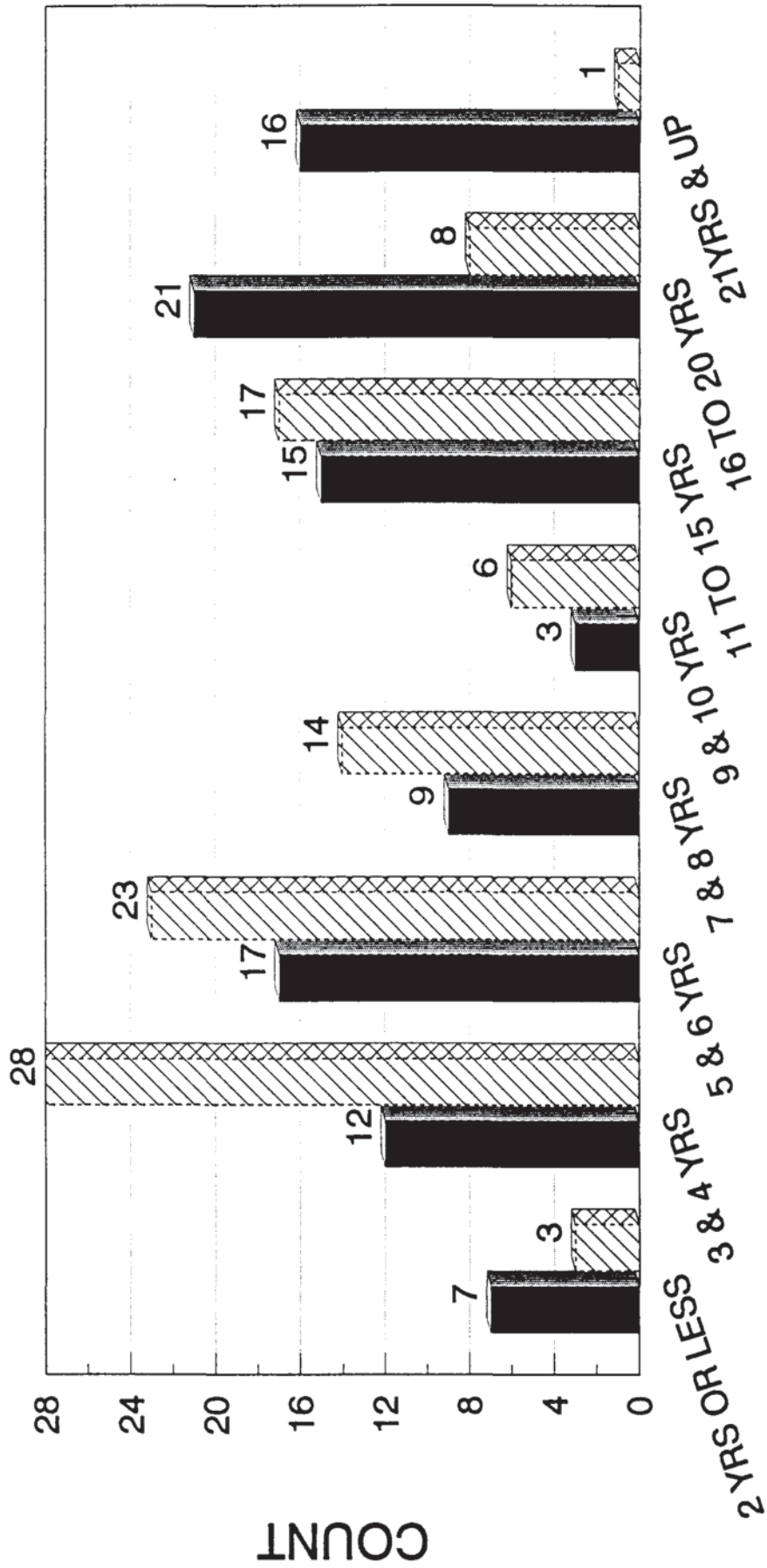


CHART VII

## YEARS OF SERVICE

PERCENT OF TOTAL # OF OFFICERS
  PERCENT USING SPRAY

APPENDIX 5

# 1994 COSTS FOR OC

ALREADY IN THE BUDGET

UNIT COSTS      REGULAR CANS    - \$12.95  
                       INERT CANS        - \$10.95  
                       HOLSTERS          - \$16.00

DIVISION	UNITS REQUIRED	COSTS OF REGULAR CHEMICAL	UNITS OF INERT & HOLSTER	COSTS OF INERT UNITS	COSTS OF HOLSTER UNITS
12	110	1,424.50	99	1,084.05	1,584.00
13	155	2,007.25	142	1,554.90	2,272.00
14	120	1,554.00	107	1,171.65	1,712.00
15	110	1,424.50	100	1,095.00	1,600.00
16	150	1,942.50	136	1,489.20	2,176.00
17	75	971.25	66	722.70	1,056.00
21	40	518.00	36	394.20	576.00
22	60	777.00	54	591.30	864.00
23	28	362.60	25	273.75	400.00
24	50	647.50	45	492.75	720.00
25	30	388.50	26	284.70	416.00
ADMIN.	75	971.25	69	755.55	1,104.00
TOTALS	1,003.00	12,988.85	905.00	9,909.75	14,480.00
			TOTALS	\$12,988.85	
				\$9,909.75	
				\$14,480.00	
					\$37,378.60

**TAXES**

Costs - \$37,378.60  
 PST-    2,616.50  
 GST-    1,121.58

TOTAL COST - \$41,116.68

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<b>DIVISION #11 REPLACEMENT COSTS:</b>	50	x	\$12.95=	\$647.50
	pst		45.33=	45.33
	gst		19.33=	19.43
	TOTAL			<u>\$712.32</u>