INSTRUCTIONS: Please use this form to enter information directly into the WORD document as the protocol for your registration on the Cambridge Criminology Registry of EXperiments in Policing Strategy and Tactics (REX-POST) or the Registry of EXperiments in Correctional Strategy and Tactics (REX-COST).

CONTENTS:
1. NAME AND HYPOTHESES
2. ORGANIZATIONAL FRAMEWORK
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6. TIMING
7. RANDOM ASSIGNMENT
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9. MEASURING AND MANAGING TREATMENTS
10. MEASURING OUTCOMES
11. ANALYSIS PLAN
12. DUE DATE AND DISSEMINATION PLAN
1. NAME AND HYPOTHESES

1.1 Name of Experiment:
The Rialto Police Department Wearable Cameras Experiment

1.2 Principal Investigator:
1.2.1 Barak Ariel, PhD
Cambridge University

1.3 Co-Principal Investigator:
1.3.1 William Farrar (Chief of Police)
City of Rialto Police Department

1.4 General Hypothesis:
Wearing wearable video cameras by patrol officers will increase officers’ compliance rates, compared to not wearing wearable video cameras.

1.5 Specific Hypotheses:
1.5.1 Wearing personal video cameras will decrease the number of citizens’ complaints lodged against participating police officers, compared to control group.
1.5.2 Wearing personal video cameras will decrease the prevalence of incidents with police use of force, compared to control group.
1.5.3 List all subgroups to be tested for all varieties of outcome measures:
(Of both officers and third-parties):
1.5.3.1 Gender
1.5.3.2 Age (natural cut-off point)
1.5.3.3 Years of experience (natural cut-off point)
1.5.3.4 Ethnicity (all subgroups available)
1.5.3.5 Police-led operations versus routine police response
1.5.3.6 Interaction with the public at high-crime geographic areas versus low-crime geographic areas (natural cut-off points)
1.5.3.7 Interaction with the public during day shifts versus night shifts
1.5.3.8 New recruits vs. experienced officers
2. ORGANIZATIONAL FRAMEWORK

2.1 Dual Partnership: Operating agency delivers treatments with independent research organization providing random assignment, data collection, analysis.

2.1.1 Name of Operating Agency: Rialto Police Department

2.1.2 Name of Research Organization: University of Cambridge

3. UNIT OF ANALYSIS

Patrol shifts

4. ELIGIBILITY CRITERIA

4.1 Criteria Required (list all)

4.1.1 Uniformed front-line police officers’ shifts (including new recruits in training)

4.1.2 Within Rialto Police Department geographic jurisdiction

4.2 Criteria for Exclusion (list all)

4.2.1 Surreptitious interviews with victims or suspects (e.g., sex offenders and gang members), in which recording of the communication may be counter-productive

4.2.2 Lengthy or extensive interviews in police custody (e.g., child abuse reports, sexual battery or rape reports)

4.2.3 Emergency situations where activating the device will present safety risks

4.2.4 Special operations (e.g., football games, payback days, holidays), in which more than 50% of the department is involved in non-routine activities

5. PIPELINE: RECRUITMENT OR EXTRACTION OF CASES

(answer all questions)

5.1 Where will cases come from?

Rialto Police Department

5.2 Who will obtain them?

Data Analysis Team (DAT) consisting of RPD Professional Standards – Unit Sergeant and Administrative Assistant (confidential employees), Crime Analysis Supervisor and Chief Farrar (Co-Investigator).

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1 Registry of these interviews is required
5.3 **How will they be identified?**
Experimental shifts will be identified by DAT and assigned by Cambridge at random.

5.4 **How will each case be screened for eligibility?**
All RPD patrol police officers are eligible (n=54); eligibility of shifts (n=19 per week) pursuant to Section 4 above will be screened weekly for routine patrol and daily for special patrol tasks.

5.5 **Who will register the case identifiers prior to random assignment?**
RPD Crime Analysis Unit Supervisor.

5.6 **What social relationships must be maintained to keep cases coming?**
None.

5.7 **Has a Phase I (no-control, “dry-run”) test of the pipeline and treatment process been conducted?**
Yes

5.7.1 **how many cases were attempted to be treated?**
Two weeks of 100% assignment

5.7.2 **how many treatments were successfully delivered**

5.7.3 **how many cases were lost during treatment delivery**

6. **TIMING: CASES COME INTO THE EXPERIMENT IN**
*(check only one)*

6.1 A trickle-flow process, one case at a time

6.2 A single batch assignment

6.3 Repeated batch assignments X (random assignment every week, for the next week of shift pattern)

6.4 Other (describe below)

7. **RANDOM ASSIGNMENT**

7.1 **How is random assignment sequence to be generated?**
*(Check one from 1, 2 or 3 below)*

7.1.1 Random numbers table → case number sequence → sealed envelopes with case numbers outside and treatment assignment inside, with 2-sheet paper surrounding treatment

7.1.2 Random numbers case-treatment generator program in secure computer - The Cambridge Randomiser

7.1.3 Other (please describe below)
7.2 Who is entitled to issue random assignments of treatments?

7.2.1 Role: Co-Principle Investigator

7.2.2 Organization: Rialto Police Department Chief (Cambridge Randomiser)

7.3 How will random assignments be recorded in relation to case registration?

7.3.1 Name of data base: Cambridge Randomiser RPD II.

7.3.2 Location of data entry: RPD

7.3.3 Persons performing data entry: RPD Professional Standards Unit.

8. TREATMENT AND COMPARISON ELEMENTS

8.1 Experimental or Primary Treatment

8.1.1 What elements must happen, with dosage level (if measured) indicated.

8.1.1.1 Element A: wearable, personal cameras attached to each patrolling officer during experimental shifts, with capability of capturing and recording police interaction with the public (offenders, witnesses, victims), in both colour video and audio.

8.1.1.2 Element B: each ‘experimental shift’ of uniformed front-line police patrol unit consist of nine officers ((1) sergeant; (1) corporal; and (7) officers)

8.1.1.3 Cameras must be turned on during every interaction with the public, until the situation is stabilized.

8.1.2 What elements must not happen, with dosage level (if measured) indicated.

8.1.2.1 Element A: cross over

8.2 Control or Secondary Comparison Treatment

8.2.1 What elements must happen, with dosage level (if measured) indicated.

8.2.1.1 Element A: no 8.1.1.1 above during control shifts

8.2.2 What elements must not happen, with dosage level (if measured) indicated.

8.2.2.1 Element A: Cross over.
9. MEASURING AND MANAGING TREATMENTS

9.1 Measuring (see Appendix A)

9.1.1 How will treatments be measured?

9.1.1.1 Dichotomous measurement of treatment assignment.

9.1.1.2 Rich video-audio data from third party provider Taser Inc (see Appendix D)

9.1.2 Who will measure them?

Taser Inc.

9.1.3 How will data be collected?

Computerized collection using IAPro and Blue Team software.

9.1.4 How will data be stored?

Computer files.

9.1.5 Will data be audited?

Yes.

9.1.6 If audited, who will do it?

DAT personnel and Chief of Police

9.1.7 How will data collection reliability be estimated?

Cambridge calculations.

9.1.8 Will data collection vary by treatment type?

No. treatment is identical in all cases.

9.2 Managing

9.2.1 Who will see the treatment measurement data?

DAT personnel and Cambridge.

9.2.2 How often will treatment measures be circulated to key leaders?

Bi-monthly.

9.2.3 If treatment integrity is challenged, whose responsibility is correction?

Chief of Police.

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2 IA Pro is a software program used by internal affairs and professional standards units in over 340 public safety agencies in Canada, Australia, New Zealand and the USA. Blue Team is a web-enabled software program was designed to support patrol, command and supervisory staff on the front-lines; it tracks and records complaints, use-of-force, vehicle accidents and pursuits.
10. MEASURING AND MONITORING OUTCOMES

10.1 Measuring

10.1.1 How will outcomes be measured?
All X and O in terms of:

10.1.1.1 Number of formal complaints lodged by a supervisor regarding officer misconduct or performance per patrol hour\(^3\).

10.1.1.2 Number of incidents with the use of force per shift\(^4\).

10.1.1.3 Rich video-audio data from third party provider Taser Inc

10.1.2 Who will measure them?
Rialto Police Department Professional Standards Unit.

10.1.3 How will data be collected?
IAPro and Blue Team software

10.1.4 How will data be stored?
DAT secured systems.

10.1.5 Will data be audited?
Yes.

10.1.6 If audited, who will do it?
Chief of Police.

10.1.7 How will data collection reliability be estimated?
Reading of all incident reports during and after the experiment (both treatment and control), for measurement of accuracy and precision of data.

10.1.8 Will data collection vary by treatment type?
No.

10.2 Monitoring

10.2.1 How often will outcome data be monitored?
Biweekly.

10.2.2 Who will see the outcome monitoring data?
Cambridge.

\(^3\) Number of formal complaint is defined as a complaint where the reporting party either requests the alleged misconduct or performance related issues be investigated or the reporting party completes the department complaint form.

\(^4\) Physical force more than a basic control or compliance hold, OC spray, baton, Taser, canine bite
10.2.3 When will outcome measures be circulated to key leaders?
Monthly.

10.2.4 If experiment finds early significant differences, what procedure is to be followed?
Discuss with leaders.

11. ANALYSIS PLAN

11.1 Which outcome measure is considered to be the primary indicator of a difference between experimental treatment and comparison group?

11.1.1 Total number of complaints against patrolling officers per officer per patrol hour (GLM, with number of complaints during the experimental period (365 days) as dependant variable and number of complaints during the pre-experimental period (365 days) as a covariate).

11.1.2 Total number of incidents in which police force was used per patrol hour per officer (GLM, with number of use-of-force indicants during the experimental period (365 days) as dependant variable and use-of-force indicants during the pre-experimental period (365 days) as a covariate).

11.2 Which outcome measure is considered to be the secondly indicator of a difference between experimental treatment and control group?
Customised Tankebe legitimacy before-after survey of participating officers, substantially in the form of Appendix C.

11.3 What is the minimum sample size to be used to analyze outcomes?
988 shifts (19 shifts per week x 52 weeks)

11.4 Will all analyses employ an intention-to-treat framework?
Yes.

11.5 What is the threshold below which the percent Treatment-as-Delivered would be so low as to bar any analysis of outcomes?
60%

11.6 Who will do the data analysis?
Cambridge.

11.7 What statistic will be used to estimate effect size?
Cohen’s d (1988)

11.8 What statistic will be used to calculate P values?
GLM with zero-inflated distribution or Poisson distribution
11.9 What is the magnitude of effect needed for a two-tailed, p = .05 difference to have an 80% chance of detection with the projected sample size (optional but recommended calculation of power curve) for the primary outcome measure (at allocation ratio between the arms of 1:1)

\[ d = 0.18 \]

(See Appendix B for power calculations)

11.10 Any additional analyses will be conducted?

None.

12. DISSEMINATION PLAN

12.1 What is the date by which the project agrees to file its first report on CCR-RCT? (report of delay, preliminary findings, or final result).

Within 6 months.

12.2 Does the project agree to file an update every six months from date of first report until date of final report?

Yes.

12.3 Will preliminary and final results be published, in a 250-word abstract, on CCR-RCT as soon as available?

Yes.

12.4 Will CONSORT requirements be met in the final report for the project? (See http://www.consort-statement.org/)

Yes.

12.5 What organizations will need to approve the final report? (Include any funders or sponsors).

RPD.

12.6 Do all organizations involved agree that a final report shall be published after a maximum review period of six months from the principal investigator’s certification of the report as final?

Yes.

12.7 Does principal investigator agree to post any changes in agreements affecting items 12.1 to 12.6 above?

Yes.

12.8 Does principal investigator agree to file a final report within two years of cessation of experimental operations, no matter what happened to the experiment? (e.g., “random assignment broke down after 3 weeks and the experiment was cancelled” or “only 15 cases were referred in the first 12 months and experiment was suspended”).

Yes.
Appendix A

Random Assignment Sequence

\( n_{\text{officers}} = 54, \ N_{\text{teams}} = 6, \ N_{\text{shifts per week}} = 19, \ N_{\text{shifts as per year 2012}} = 988 \)

**RA:** 19 SHIFTS RANDOMLY ASSIGNED TO TREATMENT AND CONTROL CONDITIONS, EVERY SUNDAY FOR THE FOLLOWING 7 DAYS, FOR 52 WEEKS (N=988)

### RIALTO POLICE DEPARTMENT PATROL PATTERNS

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DAY SHIFT</strong></td>
<td>TEAM 2</td>
<td>TEAM 1</td>
<td>TEAM 1</td>
<td>TEAM 1</td>
<td>TEAM 3</td>
<td>TEAM 2</td>
<td>TEAM 2</td>
</tr>
<tr>
<td><strong>NIGHT SHIFT</strong></td>
<td>TEAM 5</td>
<td>TEAM 5</td>
<td>TEAM 5</td>
<td>TEAM 4</td>
<td>TEAM 4</td>
<td>TEAM 4</td>
<td>TEAM 3</td>
</tr>
<tr>
<td><strong>COVER</strong></td>
<td>TEAM 6</td>
<td>TEAM 6</td>
<td>TEAM 6</td>
<td>TEAM 6</td>
<td>TEAM 6</td>
<td>TEAM 3</td>
<td></td>
</tr>
</tbody>
</table>
162 OFFICER SHIFTS PER WEEK RANDOMLY ASSIGNED TO TREATMENT AND CONTROL CONDITIONS, EVERY SUNDAY FOR THE FOLLOWING 7 DAYS, FOR 52 WEEKS (N=8424)

**RIALTO POLICE DEPARTMENT PATROL PATTERNS:**

<table>
<thead>
<tr>
<th>TEAMS</th>
<th>N OFFICERS PER TEAM</th>
<th>DAYS</th>
<th>TIME</th>
<th>OFFICER SHIFTS PER WEEK</th>
<th>OFFICERS SHIFTS IN 12 MONTHS (~52 weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team 1 (days)</td>
<td>10</td>
<td>Tues/Wed/Thurs</td>
<td>0600-1830</td>
<td>3 days x 10 officers = 30</td>
<td>1,560</td>
</tr>
<tr>
<td>Team 2 (days)</td>
<td>9</td>
<td>Sat/Sun/Mon</td>
<td>0600-1830</td>
<td>3 days x 9 officers = 27</td>
<td>1,404</td>
</tr>
<tr>
<td>Team 4 (nights)</td>
<td>10</td>
<td>Thurs/Fri/Sat</td>
<td>1800-0630</td>
<td>3 days x 10 officers = 30</td>
<td>1,560</td>
</tr>
<tr>
<td>Team 5 (nights)</td>
<td>9</td>
<td>Mon/Tues/Wed</td>
<td>1800-0630</td>
<td>3 days x 9 officers = 27</td>
<td>1,404</td>
</tr>
<tr>
<td>Team 6 (night cover)*</td>
<td>7</td>
<td>Tues/Wed/Thurs/Fri</td>
<td>1400-0000</td>
<td>4 days x 7 officers = 21</td>
<td>1,092</td>
</tr>
<tr>
<td>Team 3 (day cover)</td>
<td>9</td>
<td>Fri</td>
<td>0600-1800</td>
<td>1 day x 9 officers = 9</td>
<td>468</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sat</td>
<td>1400-0230</td>
<td>1 day x 9 officers = 9</td>
<td>468</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sunday</td>
<td>1800-0630</td>
<td>1 day x 9 officers = 9</td>
<td>468</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>54</strong></td>
<td></td>
<td><strong>162</strong></td>
<td></td>
<td><strong>8,424</strong></td>
</tr>
</tbody>
</table>

* Team 6 will be as 4 for approximately 3 months, until new officers join this team.
2,038 OFFICER SHIFT HOURS PER WEEK RANDOMLY ASSIGNED TO TREATMENT AND CONTROL CONDITIONS, EVERY SUNDAY FOR THE FOLLOWING 7 DAYS, FOR 52 WEEKS (N=52,998)

RIALTO POLICE DEPARTMENT PATROL PATTERNS:

<table>
<thead>
<tr>
<th>TEAMS</th>
<th>N OFFICERS PER TEAM</th>
<th>DAYS</th>
<th>TIME</th>
<th>OFFICER SHIFT HOURS PER WEEK</th>
<th>OFFICERS SHIFT HOURS IN 12 MONTHS (~52 weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team 1 (days)</td>
<td>10</td>
<td>Tues/Wed/Thurs</td>
<td>0600-1830</td>
<td>12.5 hours x 3 days x 10 officers = 375.0</td>
<td>19,500</td>
</tr>
<tr>
<td>Team 2 (days)</td>
<td>9</td>
<td>Sat/Sun/Mon</td>
<td>0600-1830</td>
<td>12.5 hours x 3 days x 9 officers = 337.5</td>
<td>17,550</td>
</tr>
<tr>
<td>Team 4 (nights)</td>
<td>10</td>
<td>Thurs/Fri/Sat</td>
<td>1800-0630</td>
<td>12.5 hours x 3 days x 10 officers = 375.0</td>
<td>19,500</td>
</tr>
<tr>
<td>Team 5 (nights)</td>
<td>9</td>
<td>Mon/Tues/Wed</td>
<td>1800-0630</td>
<td>12.5 hours x 3 days x 9 officers = 337.5</td>
<td>17,550</td>
</tr>
<tr>
<td>Team 6 (night cover)*</td>
<td>7</td>
<td>Tues/Wed/Thurs/Fri</td>
<td>1400-0000</td>
<td>10.0 hours x 4 days x 7 officers = 280.0</td>
<td>14,560</td>
</tr>
<tr>
<td>Team 3 (day cover)</td>
<td>9</td>
<td>Fri</td>
<td>0600-1800</td>
<td>12.0 hours x 1 day x 9 officers = 108.0</td>
<td>5616</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sat</td>
<td>1400-0230</td>
<td>12.5 hours x 1 day x 9 officers = 112.5</td>
<td>5850</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sunday</td>
<td>1800-0630</td>
<td>12.5 hours x 1 day x 9 officers = 112.5</td>
<td>5850</td>
</tr>
<tr>
<td>TOTAL</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td>2,038</td>
</tr>
</tbody>
</table>

* Team 6 will be as 4 for approximately 3 months, until new officers join this team.
MONTHLY SHIFT PATTERNS:

DAY
T-W-T
0600-1830

| TEAM 1 | Jan 2012 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|--------|----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| CALL # | NAME     | RI# | HT# | S  | M  | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  | S  | S  |
| Sergeant | Position 1 |   |    | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Corporal | Position 1 |   |    | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer  | Position 1 |   |    | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer  | Position 2 |   |    | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer  | Position 3 |   |    | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer  | Position 4 |   |    | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer  | Position 5 |   |    | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer  | Position 6 |   |    | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer  | Position 7 |   |    | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer  | Position 8 |   |    | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |

OFFICERS 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10
# DAY

**S-S-M**

0600-1830

| TEAM 2 | Jan 2012 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|--------|----------|---|---|---|---|---|---|---|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| CALL # | NAME | RI# | HT# | S | M | T | W | T | F | S | S | M | T | W | T | F | S | S | M | T | W | T | F | S | S | M | T | W | T | F | S |
| Sergeant | Position 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Corporal | Position 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer | Position 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer | Position 2 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer | Position 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer | Position 4 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer | Position 5 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer | Position 6 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer | Position 7 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| OFFICERS | | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |

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| Team 3 | Jan 2012 | CALL # | NAME | RI# | HT# | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| Sergeant Position 1 | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Corporal Position 1 | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 1 | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 2 | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 3 | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 4 | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 5 | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 6 | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 7 | | | | | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

| | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 | 9 |
## NIGHT

### T-F-S

#### 1800-0630

| Team 4 | Jan 2012 | CALL # | NAME | RI# | HT# | S | M | T | W | T | F | S | S | M | T | W | T | F | S | S | M | T | W | T | F | S |
| Sergeant Position 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Corporal Position 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Corporal Position 2 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 1 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 2 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 3 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 4 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 5 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 6 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 7 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| Officer Position 8 | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |

| OFFICERS | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 11 |
## NIGHT

**M-T-W**

1800-0630

| Team 5 | Jan 2021 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 |
|--------|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| CALL # | NAME     | RI#| HT#| S  | M  | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  | S  | S  | M  | T  | W  | T  | F  |
| Sergeant| Position 1 | X  |  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer | Position 1 | X  |  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer | Position 2 | X  |  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer | Position 3 | X  |  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer | Position 4 | X  |  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer | Position 5 | X  |  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer | Position 6 | X  |  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |
| Officer | Position 7 | X  |  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |

### 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
* Team 6 will be as 4 for approximately 3 months, until new officers join this team.
Appendix B

Power Calculations

**Base rate:**
Total complaints in 2009 = 36
Total complaints in 2010 = 51
Total use of force in 2009 = 70
Total use of force in 2010 = 65
Appendix C

Customised Tankebe Questionnaire on Officers’ legitimacy (TBA)
My name is Tony Farrar and I am the Police Chief for the City of Rialto Police Department in the state of California. I am also a graduate student at the Institute of Criminology, Cambridge.

For my graduate degree, I am investigating whether the police should use personal video cameras more often during patrols. Video and audio documentation has become an integral and valued tool in law enforcement for those agencies that have adopted patrol car mounted cameras. A recent study conducted by the International Association of Chiefs of Police (IACP) points out that video documentation not only provides solid evidence documentation, but also significantly improved the officer’s ability to respond to complaints. Wearable video technology is the next logical step.

Every police officer who has encountered a tense or uncertain situation can describe the effects of stress on perception. When the officer encounters a violent subject, perception can become even more focused. Personal video cameras will assist with incident reconstruction, report writing, aid in the prosecution of offenders by capturing an objective recording of the offender’s actions. Additionally, the same study found that fifty-one percent of the general population said they would change their behavior if they know they are being video recorded.

I need your input on this topic. Your help can potentially shape police policy on wearable video technology in Rialto and nationwide. I kindly ask you to fill out the survey attached to this letter. It contains three sections; (1) your view on authority, (2) your view on public trust and the perception of the public, and (3) your feelings about wearing a personal video camera. Please answer the questions to the best of your ability

I am more than happy to discuss this further and address any questions you may have. My e-mail address is tw372@cam.ac.uk and my phone is 909-421-7121.
SECTION ONE: On a scale from 1 to 5 with 1 = “strongly disagree”, 2 = “disagree”, 3 = neither agree nor disagree”, 4 = “agree”, and 5 = “strongly agree”, please indicate how much each of the following statements reflects your own views about your authority, and about your relationship with colleague officers circling ONE number under each statement.

1. As a police officer, I feel that I represent the interests of the people in the community in which I work.
   
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

2. It is morally right for me as an officer to have special authority over my fellow citizens (e.g. to stop, search or make arrests).
   
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

3. I sometimes worry that I am not really up to the job of being a police officer.
   
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

4. Putting on my police uniform/badge makes me feel that I have a special kind of authority.
   
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

5. I am confident that I have enough authority to do my job well.
   
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

6. I believe it is right for me to give directives to members of the public and to expect them to obey them.
   
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

7. The law governing my work is consistent with the values and beliefs of the community in which I work.
   
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

8. If I were to speak with members of the community in which I work, I would find that their values are consistent with what my authority stands for.
   
   Strongly Disagree 2 3 4 5 Strongly Agree
   1
9. I believe the authority I have is based on the lawfulness of my decisions and actions.
   
<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
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<td></td>
<td>Strong Agree</td>
</tr>
</tbody>
</table>

10. I believe I can justify the laws I have to enforce in terms of the values of most of the people I have to police.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
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<td>Strong Agree</td>
</tr>
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</table>

11. I sometimes have doubts about whether the laws I have to enforce are proper.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
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<th>3</th>
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<th>Strongly Agree</th>
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<td>Strong Agree</td>
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</table>

12. I feel supported in my work by my colleague officers.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
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<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
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<td></td>
<td>Strong Agree</td>
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</table>

13. I feel a sense of loyalty to my colleagues in my station.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
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<td>Strong Agree</td>
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<table>
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<tr>
<th>Strongly Disagree</th>
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<th>3</th>
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<th>Strongly Agree</th>
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<td>Strong Agree</td>
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</table>

15. I feel my colleagues in my station respect me.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
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<td></td>
<td>Strong Agree</td>
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</table>

16. There is a good communication among my colleagues.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
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<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
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<td>Strong Agree</td>
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</table>

17. My colleagues in this station trust me.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
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<td></td>
<td></td>
<td></td>
<td>Strong Agree</td>
</tr>
</tbody>
</table>

18. Most officers in my station get along very well with each other.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
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<td></td>
<td>Strong Agree</td>
</tr>
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</table>

19. One can never be too careful with one’s colleagues in this organisation.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
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<td></td>
<td></td>
<td></td>
<td>Strong Agree</td>
</tr>
</tbody>
</table>
SECTION TWO: On a scale from 1 to 5 with 1 = “strongly disagree”, 2 = “disagree”, 3 = neither agree nor disagree”, 4 = “agree”, and 5 = “strongly agree”, please indicate how much each of the following statements reflects your own views about decision-making in your organization by circling ONE number under each statement.

1. The decisions of my senior officers are consistent across every officer in my station.
   *Strongly Disagree* 2 3 4 5 *Strongly Agree*

2. I feel that my senior officers treat me with respect and dignity.
   *Strongly Disagree* 2 3 4 5 *Strongly Agree*

3. My senior officers usually give me an honest explanation for the decisions they make that affect me.
   *Strongly Disagree* 2 3 4 5 *Strongly Agree*

4. My senior officers take account of my needs when they are making decisions that affect me.
   *Strongly Disagree* 2 3 4 5 *Strongly Agree*

5. I am treated fairly in my police station.
   *Strongly Disagree* 2 3 4 5 *Strongly Agree*

6. The decisions of my senior officers are equally fair to everyone.
   *Strongly Disagree* 2 3 4 5 *Strongly Agree*

7. Decisions by my senior officers are based on facts, not personal biases or opinions.
   *Strongly Disagree* 2 3 4 5 *Strongly Agree*

8. Overall, I receive excellent pay.
   *Strongly Disagree* 2 3 4 5 *Strongly Agree*

9. I am satisfied with my present pay.
   *Strongly Disagree* 2 3 4 5 *Strongly Agree*

10. I am well paid considering the hours I work.
    *Strongly Disagree* 2 3 4 5 *Strongly Agree*

11. Considering how much I work, I am satisfied with my pay.
    *Strongly Disagree* 2 3 4 5 *Strongly Agree*

12. Overall, I receive excellent allowance and benefits.
Strongly Disagree 2 3 4 5 Strongly Agree

13. I am satisfied with my personal financial situation.
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

14. My senior officers take account of my needs when they are making a decision.
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

15. I feel that the way my senior officers assign duties for the week is fair to all officers.
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

16. I feel that my workload is far more than other officers within my rank.
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

17. There is high level of integrity among most RPD officers.
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

18. I feel that the way evaluations are done in this organization is fair to all officers.
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

19. I am treated politely by my senior officers.
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

20. The way things are done in my station respects my rights.
   Strongly Disagree 2 3 4 5 Strongly Agree
   1

21. I feel that the promotion of officers is based on procedures that are fair to all officers.
   Strongly Disagree 2 3 4 5 Strongly Agree
   1
SECTION THREE: On a scale from 1 to 5 with 1 = “strongly disagree”, 2 = “disagree”, 3 = neither agree nor disagree”, 4 = “agree”, and 5 = “strongly agree”, please indicate how much each of the following statements reflects your own views about RPD. Please, circling ONE number under each statement.

1. I feel a strong sense of “belonging” to RPD.
   - Strongly Disagree 2 3 4 5 Strongly Agree

2. I feel proud to tell people I am a police officer with RPD.
   - Strongly Disagree 2 3 4 5 Strongly Agree

3. Even if it were to my advantage, I do not feel it would be right to leave RPD.
   - Strongly Disagree 2 3 4 5 Strongly Agree

4. I feel that RPD deserves my loyalty.
   - Strongly Disagree 2 3 4 5 Strongly Agree

5. I feel very little loyalty to the RPD.
   - Strongly Disagree 2 3 4 5 Strongly Agree

6. I have a sense of obligation to RPD.
   - Strongly Disagree 2 3 4 5 Strongly Agree

7. I find that my values and values of RPD are very similar.
   - Strongly Disagree 2 3 4 5 Strongly Agree

8. Overall, I feel I am satisfied with my job.
   - Strongly Disagree 2 3 4 5 Strongly Agree

9. For me, RPD is the best of all possible employers.
   - Strongly Disagree 2 3 4 5 Strongly Agree
10. RPD inspires the best in me in the way of job performance.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

11. Most days, I feel enthusiastic about my job.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

12. I find real enjoyment in my job.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>
SECTION FOUR: On a scale from 1 to 5 with 1 = “strongly disagree”, 2 = “disagree”, 3 = neither agree nor disagree”, 4 = “agree”, and 5 = “strongly agree”, please indicate how much each of the following statements reflects your own views about RPD. Please, circling **ONE number** under each statement.

<table>
<thead>
<tr>
<th>STATEMENT</th>
<th>FOR EACH STATEMENT BELOW, MARK AN “X” IN THE CORRESPONDING NUMBER FOR THE RESPONSE THAT BEST DESCRIBES HOW YOU FEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>1. I would feel comfortable wearing a personal video camera.</td>
<td></td>
</tr>
<tr>
<td>2. Wearing a personal video camera would improve my behavior.</td>
<td></td>
</tr>
<tr>
<td>3. Wearing a personal video camera would improve the behavior of those I contact in the field.</td>
<td></td>
</tr>
<tr>
<td>4. Wearing personal video cameras would reduce violence.</td>
<td></td>
</tr>
<tr>
<td>5. Wearing personal video cameras would reduce the number of use of force incidents I would be involved in.</td>
<td></td>
</tr>
<tr>
<td>6. Wearing personal video cameras</td>
<td></td>
</tr>
</tbody>
</table>
would reduce the number of officer complaints I would receive.

7. I always utilize a personal audio recording device in the field.

8. Is there anything else you think is important for me to know about the potential use of wearable cameras?
SECTION FIVE: ABOUT YOU

The information requested below would be used to analyze and understand how different demographic groupings view the various issues to which you have already responded.

1. Please, indicate your gender
   Female ☐ Male ☐

2. How old are you?
   18 – 22 ☐ 23 – 27 ☐ 28 – 32 ☐ 33 – 37 ☐ 38 – 42 ☐
   43 – 47 ☐ 48+ ☐

3. What is your current rank? ____________________________________________________

4. What is your total length of service as a police officer?
   Less than 2 years ☐ Between 2 – 5 years ☐ Between 6 – 10 years ☐
   Between 11 – 15 years ☐ Between 16 – 20 years ☐ Between 21 – 25 years ☐
   Between 26 – 30 years ☐ 31 or more years ☐

5. Highest level of education? ......................................................................................

6. How would you describe your ethnic origin?
   a. White – American
   b. White – Irish
   c. White – Other White Background
   d. Mixed – White and Black Caribbean
   e. Mixed – White and Black African
   f. Mixed – White and Asian
   g. Mixed – Any Other Mixed Background
   h. Asian or Asian American – Indian
   i. Asian or Asian American – Pakistani
   j. Asian or Asian American – Bangladeshi
   k. Asian or Asian American – Other Asian Background
   l. Black or Black American – Caribbean
   m. Black or Black American – African
   n. Black or Black American – Other Black Background
   o. Chinese
   p. Other
Appendix D

Treatment Apparatus: Wearable Cameras

Below please find a few pictures of the treatment apparatus: wearable camera system, charging units, and an officer wearing the gear.

1. The wearable camera is touch-screen and full color. The unit has fast forward, rewind, etc.
2. Each officer must enter their code to activate the unit.
3. At the end of the officer’s shift they only need to place the unit into the charging bank. The system will automatically download the video into the officers file folder and also begin the recharging process.
4. The units are also automatically locked into the charging bank until the officer re-enters their code.
5. The unit battery life is 12.5 hours
6. Data downloadable every day.
Pic 1: an officer standing by the charging units. These charging units are in the police department briefing room.
Pic 2: the main video unit on the officers duty belt. The unit has a touch screen and is in full colour.
Pic 3: Officer wearing the collar mount - camera. Most of the officers prefer this to the one that goes over the ear (head). There are three options with this camera; collar mount, ear (head) mount, and hat mount (baseball cap).
Pic 4: This is a picture of the three main pieces of the system; main video/battery box, push to operate assembly, and the camera itself.
Pic. 5: Another picture of the charging banks. Each bank holds 24 units. There are separate charging units for the sergeants in their office.
Pic 6: The equipment guy (corporal in the training unit) assembling the charging banks. The Banks are bolted to the floor, for security measures.
Pic 7: A close-up of the main unit on the officers duty belt.