REPORT ON OVERSEAS STUDY TOUR

ANTI-HELICOPTER STRATEGIES

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EXECUTIVE SUMMARY

Five international jurisdictions were inspected by Supt. B. Kelly and POVB Chairman J. Doyle to identify anti aircraft assisted escape strategies. Each had unique threats or strategies, but without exception, all had either structures or armed posts as a deterrence. The following is a summary of observations made of anti aircraft assisted escape strategies:

California

Although no physical barriers existed, the absence of any helicopter escapes or attempts is attributed to the six armed posts overlooking each exercise yard. Roofs are inaccessible to inmates.

California has a policy that aircraft are not to be fired upon, but force, including the use of firearms can be used to prevent an inmate from approaching an aircraft.

Californian prisons reflect the American 'gun culture' with inmates being shot not a rare event. The reliance on numerous armed posts and their regular use has created an environment where it is considered a helicopter extraction would fail.

Canada

Kent Institution experienced a helicopter extraction in 1992 despite having armed towers. The resultant investigation revealed that at least one armed tower had the opportunity to fire at the escaping inmates but failed to do so.

Since the escape, Canada has taken no further steps to prevent helicopter extractions other than to maintain armed post observation of inmate exercise areas and adopt a policy of not directing force towards aircraft but directing it at inmates approaching any aircraft.

England

After experiencing a successful helicopter extraction, all English maximum security prisons installed catenary wires. However, there appears to be no uniformity or specifications in their installation. Certainly, the distance between the wire in some locations would allow a helicopter to land and take off, particularly with the aid of...
identifiable orange spheres attached to the wires. The materials used, although cost efficient during installation, create maintenance issues.

Although no armed deterrence exists, the combination of catenary wires and the always present security dogs, make a helicopter extraction difficult but achievable, particularly with the aid of ropes lowered from the aircraft.

Also of great interest was the Police Scientific and Development Branch, Prison Security Sector which provides testing, evaluation and technical advice on all security systems and perimeter structures. The PSDB share a Memorandum of Understanding with NSW in relation to security advice leading up to the 2000 Olympics.

Northern Ireland

Northern Ireland was seen as quite unique in relation to its terrorist prison population, particularly at HMP Maze. Catenary wires were utilized, similar to those in England, although roof protection was inadequate. The installation of the wires appeared inconsistent and ineffective. However, the regular presence of military helicopters in the area appears to present the greatest deterrent to any inmate's plan of escaping by helicopter.

France

The French have experienced more helicopter extractions than any other jurisdiction inspected. In 1994, France developed a policy and clear specifications to install anti helicopter cables to all maximum security prisons. The centres inspected employed the most effective installation of cables seen in the tour. All French maximum security prisons have armed towers complementing the use of anti helicopter cables.

CONCLUSION

Each jurisdiction was considered in relation to helicopter extraction prevention strategies and structures. All were different in their approaches but without exception, all had either structures or armed post as a deterrence. Findings revealed no explanation as to why the incidence of helicopter escapes were greater in some countries than in others irrespective of strategies employed.

Clearly the effective installation of anti helicopter cables will prevent a helicopter from landing but does not prohibit an escape if lines are lowered to prisoners from the aircraft. A combination of anti helicopter wires and armed posts exposes inmates attempting to escape by helicopter as a target for potentially lethal force which is a compelling deterrent to this type of escape. Despite this and the fact that such a combination is the most comprehensive helicopter defence inspected, the threat of such
an escape cannot be eliminated and those prepared to make such an attempt are likely to escalate the level of violence involved.

Nonetheless, NSW maximum security Correctional Centres such as the MRRC and Lithgow provide no defence to a helicopter extraction. The escape of Killick in March this year demonstrated the ease with which such an escape can be achieved and this remains in the minds of many inmates.

RECOMMENDATIONS:

1. That a series of kevlar cables be installed consistent with the French specifications at maximum security centres with the priorities being the MRRC and Lithgow Correctional Centre.

2. That an armed tower be constructed at the southeast corner of the MRRC sports field to be staffed whenever inmates occupy the sports field.

3. That consideration be given for a similar armed post at Lithgow Correctional Centre as that recommended at the MRRC.

4. That anti climb devices such as electric fences or razor tape be installed at the MRRC to prevent inmate access to roofs.

5. That clear policy procedures be adopted in regard to the use of force during an aircraft intrusion into a correctional centre. Such a policy must specify that staff are not to discharge a firearm in a direction that may endanger an aircraft but are to direct the necessary force required at preventing inmates from boarding an aircraft.

6. That liaison and education continue between the department and the aviation industry.

7. That Capital Works Branch establish a liaison and possibly a Memorandum Of Understanding with the Police Scientific Development Branch of the Home Office in Great Britain to benefit from their evaluations of security equipment and structures.
REPORT ON OVERSEAS STUDY TOUR BY SUPERINTENDENT BRIAN KELLY AND SENIOR CORRECTIONAL OFFICER JOHN DOYLE IN AUGUST/SEPTEMBER 1999

Introduction

Superintendent Brian Kelly and Senior Correctional Officer John Doyle, Chairman, Prison Officers Vocational Branch (POVB) were engaged by the Commissioner of Corrective Services, Dr Leo Keliher and the Senior Assistant Commissioner, Inmate and Custodial Services, Mr R.G. Woodham, to conduct a study tour of overseas correctional centres, specifically in relation to anti-helicopter extraction strategies.

In a three week period, commencing 14 August 1999, and concluding on 4 September 1999, Messrs Kelly and Doyle visited five countries - USA, Canada, England, Northern Ireland and France. A total of 12 overseas prisons were inspected.

Planning

During the planning phase various jurisdictions were selected to enable differing strategies to the helicopter extraction threat to be considered.

All centres inspected were in developed countries and were maximum security prisons that included large outdoor inmate exercise areas. This resulted in California, USA being selected as it has large open recreation areas at maximum security centres. California has a highly developed society with a correctional system which creates a high threat of escape, in particular, Centinela Prison was of particular interest as it is within close proximity to the Mexican border which makes it ideal for a helicopter extraction. Despite these risk factors and the absence of any physical structure to prevent helicopters from landing there have been no helicopter extractions in California.

Kent Institution, Vancouver, Canada was selected as it was the site of a violent helicopter extraction in 1992 where a perimeter patrol officer was wounded by gun fire.

Correctional centres in England were selected as a successful helicopter extraction had been experienced and a system of anti-helicopter wires were installed to prevent any repetition.

Northern Ireland was selected due to the heightened threat created by a terrorist prison population with the available resources to conduct para military type operations and escapes.

France was identified as having experienced numerous helicopter extractions and attempted escapes. France also appears to have taken greater action to prevent helicopter extractions than any other country and it is also the site of the most recent helicopter extraction.
Although contacted, insufficient feedback was received from the USA Federal Bureau of Prisons, the State of Texas USA and Holland and were excluded from the tour.

The following is a summary of observations made during the tour.

**UNITED STATES OF AMERICA**

**Monday 16 August - California State Prison - Los Angeles County**

**Location:**

Lancaster, Southern California

**Gaol design:**

The California State Prison, Los Angeles County was built to accommodate 2,000 inmates in 1992. The inmate population was stepped up to 4,000 by double-bunking the cells (cell size is smaller than a one-out cell in NSW). The inmate population should be 4,000 but is currently 4,300. The Gymnasium has been converted into dormitories for extra housing. The accommodation block viewed was “battery-hen” style accommodation housing 120 inmates in double and triple-bunks in the centre of the gymnasium floor. A gun cage was located on a mezzanine level in the corner of the room.

Inmates are predominantly Categories 3 and 4 classification (scale being 1 = minimum security to 5 = supermax).

The gaol is divided into 4 main areas each having large yards and 5 accommodation units holding 200 inmates each,

- Armed posts in each accommodation unit observe the exercise yard and cell area.
- The Exercise Yard is covered by another armed post over the Programs/Kitchen/Clinic Block.
- Each yard can contain 1,000 inmates.
- Signs, “no warning shots will be fired inside those rooms”, are posted inside accommodation units and dining areas covered by armed posts.
- There are 12 towers between the perimeter
fences which are predominantly of a chain link design with razor tape.

- An electric fence running at 10,000 volts has been added in the middle of the sterile zone between the two chain link fences.
- All but two towers have been decommissioned since the erection of the electric fence. One tower is at the main pedestrian gate and one at the vehicle sally port.
- Inmates’ cells have no showers.
- There is no dog squad at the gaol. Drug dogs are brought in from other agencies if required.
- A perimeter patrol vehicle operates 24 hours per day and is armed with a Ruger mini 14, .38 revolver, and 37 millimetre grenade launcher (gas gun) to fire rubber bullets.
- A 12 person security squad responds to all emergencies. The squad investigates incidents such as assaults and to some extent staff investigations (in relation to issues such as allegations of excessive use of force). They also prepare briefs for the District Attorney (DA) for crimes committed in the gaol.
- Court sittings and prosecutions are held at the gaol.
- There is a severe gang problem in the Californian correctional system. They have a full-time Gang Investigation Unit (three positions) attached to the Security Squad. Its function is very similar to a gaol intelligence officer, concentrating on, but certainly not limited to gangs. They liaise with all the usual outside agencies to identify (validate) prison gang members who are then sent to Pelican Bay, which is a Supermax institution.
- The gaol also has its own firing range. Staff working in armed posts are required to shoot quarterly and will soon be required to shoot monthly. The current qualification level is 70%.
- All custodial staff carry handcuffs, batons and pepper spray.

Gaol routine:

- Similar routine to the NSW system, buy-ups, phone calls etc,
- Visits are held three days a week with conjugal visits once every three months.
- Visitors are allowed to bring in parcels and foodstuffs for the inmates once every three months.

Escapes:

- Prior to the installation of the electric fence, there were two escapes, however, no escapes have occurred over the perimeter fence since then.

Escapes by helicopter:

- None
- When told the details of the MRRC helicopter extraction, staff where surprised and said in very confident terms that "no way a helicopter would leave here with an inmate". Staff stated that they would fire on a helicopter when it was on the ground, they would firstly fire at the inmate to stop him from reaching the helicopter. Staff did not appear to be conversant with the States’ policy in relation to firing at aircraft.
• Inmates are shot with some regularity at this Centre, when an alarm goes off and an incident is in progress all inmates are made to sit on the ground.
• In extremely serious incidents, inmates are made to lay face down on the ground, which they do obviously in fear of being shot.

Staffing:
• Total staffing approximately 700.
• All posts are filled every day, on overtime, no post is left vacant.
• The gaol offers several types of services for their employees such as upholstery in the motor shop where staff can provide their vehicles and have them upholstered at cost price (materials plus some administrative costs). Work is performed by inmates undertaking training courses.

Tuesday 17 August - Centinela State Prison

Location:
• Calipatria, California (2 hours east of San Diego in the desert) almost on the Mexican border, extremely hot climate.

Gaol design:
• Same layout as California State Prison, Los Angeles County. The design is repeated throughout the state at most modern maximum security centres. Sites are selected to suit the prison design not visa versa.
• Centinela Prison was built in 1993. The current inmate population is 4,500.
• Recurrent budget of US$74m.
• The perimeter fence is the same as California State Prison, Los Angeles County
  ▶ Two rows of chain-link fence with one small roll of razor-tape on top and an electric fence in between.
  ▶ Electric fences are the same height as the perimeter fences.
  ▶ There is a large sterile zone between the perimeter fence and the accommodation units, which face in towards the exercise yards.

• Pedestrian access is via Central Control.
• There are two separate visiting blocks - one for A and B sections, and one for C and D sections.
• The vehicle sally port is at the rear of gaol. All deliveries are received at the store and bought in by correctional staff.
• One of the accommodation units viewed housed 200 inmates (75% of which are serving life sentences).
• Accommodation units are very secure with no window other than a heavily glazed slot running 4 or 5 feet high in each cell.
• Accommodation units are airconditioned with air being forced into cells.
• Centinela Prison has similar over-crowding solutions to Los Angeles County (in converting gymnasiums to dormitories).
• The gaol has its own firing range. Staff working at armed posts are required to shoot quarterly and will soon be required to shoot monthly. Current qualification level is 70%.
• Deputy Warden advised that only a couple of shots had been fired during his employment at this prison (both warning shots).
• Staff are equipped with batons, hand-cuffs and pepper-spray
  ▶ The Deputy Warden and the Union agreed that the use of pepper-spray, in particular, had reduced incidents of violent behaviour in the Centre.
  ▶ No incidents of abuse of pepper-spray, hand-cuffs or batons recorded.
  ▶ Officers are issued with these articles when coming on duty.
• The gaol has its own water supply, coming in from a canal, own water filtration and pumping systems, re-cycling and waste water treatment plant.
  ▶ Tests show that the water treatment plant is a successful enterprise in terms that the water going back out after treatment is cleaner than the initially canal water.
• Centinela is mainly an education gaol rather than industrial, in that the workshops are mainly geared for the education of inmates.

Gaol routine:

• Similar routines as Lancaster with the exception of the limited numbers of inmates in the yards at any one time. (Max. 500)
• Inmates have a choice of either going into the yards or staying in their cells or the accommodation unit.
• All inmates are sentenced to more than one year imprisonment. First time inmates receive one day off of their sentence (called “half-time”) for each day they work. Second time inmates only receive “one-fifth time”.

Escapes:

• No escapes from the maximum security at Centinela.
Staffing:

- Approximately 700.
- The gaol offers several types of services for their employees such as car wash, shoe shining and staff haircuts.

Additional notes:

- California has a very tough law and order regime, "three strikes and you’re out legislation". The law also provides for notification to residents of release of paedophiles.
- Officials in California stated that crime is decreasing due to the tough laws. Gaol populations have obviously "blown-out" but have now levelled.
- Very high population (California has over 160,000 inmates), number of incidents in gaol are high due to population level.
- Weights and body-building machines have been removed from all Californian prisons due to public out-cry.
- California has the death penalty - which occurs by lethal injection. This takes place at San Quentin, being an older gaol, similar to Foulsome Prison. With the exception of the death row inmates, San Quentin houses minimum security inmates. This is mainly due to its age and antiquated design.
- All maximum security inmates are held in the newer gaols such as Los Angeles County and Centinela.

CANADA

Thursday 19 August - Kent Institution, Agazziz

Location:

- 1.5 hrs east of Vancouver;
  British Columbia, Canada

Gaol design:

- The Kent Institution was built in 1978. It currently holds 250 maximum security inmates and a medium security centre is being built next door.
- The Kent Institution has four perimeter towers which have been decommissioned and, as a consequence, are not manned with the exception of one which is manned when the sports field is being used by inmates.
- All inmate areas, yards, sports field, dining room, gymnasium, and workshops are covered by gun walks (except for accommodation areas).
There are two armed perimeter vehicles which patrol constantly around the perimeter 24 hours per day, seven days per week.

Although a much older gaol, the Kent Institution has some similar design features to the Californian gaols.

Escapes by helicopter:

- The site of the 1992 helicopter escape by two inmates. During the escape, an officer manning one of two perimeter patrol vehicles was shot.
- Since the escape no changes have been made to the physical structure of the gaol, in fact there are less manned towers today than at the time of the escape. Changes in policy similar to that of the policy used by the US Federal Bureau of Prisons were effectively introduced.

ENGLAND

Monday 23 August 1999 - HMP Whitemoor

Location:

- 1½ hours north of London.

Gaol Design:

- HMP Whitemoor is a maximum security gaol housing category “A” prisoners, built in 1991. It currently houses 534 inmates. The perimeter consists of masonry outer wall with roll top and inner weld mesh fence.
- Everyone is searched by a metal detector, followed by a pat search on entry to the Centre.
- A Special Security Unit (SSU) is inside the prison (a prison within a prison). This is a supermax area which was designed for IRA terrorists and the like.
- On entry to the SSU the usual security checks are done. Searching includes persons being asked to remove their shoes and the soles of their feet are checked etc. This procedure is also conducted on exit from the SSU. Officers conducting the security checks are specialists performing these duties on a two year rotation.
- Within the SSU there is another level of security again, including a masonry wall and another sterile zone within that building.
- Exercise yards in this unit included a sky-frame roof with a sheet of mesh on the bottom and the top.
- The mesh yard had steel cladding to a certain height to prevent vision and climbing.
- The yard had cameras in it and it also had a fibre optic netting over and around
it that 10 pound pressure would break. The average holes in the netting were 6 inches square.

- The total number of inmates that could be held were 14 in the main area, 3 segregation cells and one dry cell.
- HMP Whitemoor has an impressive Central Control Room. Seven Officers, including a Senior Officer sitting behind the other six, each has specific duties.
  - One is in charge of 24 monitors and is assigned specifically for the SSU.
  - One was assigned specifically for communications etc.
  - Each officer has their own area of responsibility, keeping specific details of events occurring during their shift.
  - The staff numbers in this area remain the same 24 hours per day.
- The main prison is divided up into four cell blocks.
- It has an astro-turf football field and large exercise yards.
- Catenary wires cover all exercise yards and the sports field.
  - Wires approximately 6m high are situated about 6m apart in one direction.
  - Erected from steel galvanised poles about 6 inches in diameter.
  - Wire is similar to heavy gauge fencing wire.
  - Catenary wires have small orange balls installed for visual identification of their existence.
- No armed post.
- An external perimeter patrol vehicle has an attack dog on board.
- The internal perimeter has a number of handlers with attack dogs.
- The Dog Unit is located inside the Centre with a total 52 dogs and 30 security dogs, remainder made up of bomb detection and passive drug detection dogs. 30 Dog Unit staff. A number of dog handlers have 2 or 3 dogs.

Staffing:

Total staffing of HMP Whitemoor is approximately 730. Staffing of SSU on the day we were there - 8 officers to 7 inmates.

Tuesday 24 August - HMP
High Down
Location:
London

Gaol design:

- Accommodation for up to 730 inmates.
- Similar perimeter to that of HMP Whitemoor.
- Highdown has catenary wires across the Category "A" yards at about 7-8m apart.
- Catenary wires also across the Category "B" yards at about 10 or more metres apart.
- Wires went from building to building or from yard fence to yard fence.
The orange plastic balls had all broken during cold frosts etc.
No wires across the sports field.
Officers in British gaols carry a small baton in their pocket.
Much lower staff ratio than that at HMP Whitemoor.

Tuesday 25 August - Police Scientific & Development Branch

This Branch does not only work for the Police but do work for all Government Departments and is part of the Home Office. We primarily met with the people who work for the prison security unit within the branch at a secure country site.

- Testing such as perimeter security, drug detection, metal detectors etc.
- Layout included all the different types of fences and perimeters 100m, each type including masonry walls with roll-tops on them.
- British SAS test those fences and other security systems.
- This is the way the British develop their perimeter security and have developed standards for walls and fences.
- The PSDB also test fences for sensitive port areas, sensitive energy plants etc.
- Particularly important during the IRA terrorist campaigns.
- They also test different camera and intrusion devices such as microwave, VMD and close circuit TV networks.
- They have a MOU with the NSW Police Department to provide assistance, leading up to the 2000 Olympic Games.
- The HM Prison Service don't purchase new products such as Biometrics and fence detection systems without it first being rigorously tested by the PSDB.
- Australia has no such advisory unit, however, they stated their willingness to assist us in the future, if required.

General

- British inmate population is 65,000 housed in 35 prisons.
- Inmates in the British prison system are categorised as "A", "B", "C" and "D". Category "A" are high risk inmates, broken down further into high risk, extreme high risk and normal category "A". Category "A" inmates housed at HMP High Down are not permitted anywhere where there are not helicopter wires.

PSDB researched anti-helicopter devices and strategies and showed us a report into early warning devices including radar and microphonics. They concluded that those
systems resulted in too many false alarms being given. They also investigated a system of razor tape criss-crossing yards. They also didn’t recommend this system being proceeded with. Their investigations resulted in the provision of the catenary wires that we saw at HMP High Down and HMP Whitemoor.

PSDB have also tested heartbeat monitors for installation in Gatehouses, for detection of secreted person in vehicles. The system is in use in Canada and as a result of the PSDB investigations and trials they are going to be installed in all Category “A” prisons in Britain.

NORTHERN IRELAND

Wednesday 25 August - HMP Magilligan

Location:

1 hour north of Belfast.

Gaol design:

- HMP Magilligan was built in 1972.
- It currently houses 300 medium security inmates. Also has a small minimum security section attached to it.
- Masonry outer perimeter wall with roller top on it, a sterile zone and a small weldmesh fence with razor tape on top.
- Accommodation areas were generally of an “H” block design.
- Catenary wires above all yards that inmates occupy.
- Wires were strung between the yard and fence posts. They were apart 10m apart.
- No plumbing was present in the cells.

Staffing:

500 employees.

Thursday 26 August - HMP Maghaberry

- Newest prison in Northern Ireland being built in 1984 but did not reach full operating level until 1986.
- Population of approximately 500 inmates and 700 staff.
- Masonry outer perimeter wall with roller top and a sterile zone with a small weldmesh fence with razor tape on top.
- Most of accommodation was a square design with a courtyard in the middle. Very little vision for staff in this design.
- 2 officers on each landing when inmates are out of cells.
- Catenary wires included coverage of roofs of accommodation areas however they were only 2m above those roofs, they didn’t appear effective in the event of a helicopter extraction. The helicopter would be unable to land however it
Escapes:

- Management advised us of 2 escapes. In one incident, 33 prisoners escaped after they had taken over a cell block and donned Officers uniforms and had a confrontation with the change-of-shift Officers at the Gate. One Officer was killed and numerous inmates killed in that incident.
- More recently - an escape of an inmate dressed as a woman during a family day. The inmate has not been re-captured.

Additional notes:

- The Maze was a fascinating gaol to view, purely for its uniqueness in being a terrorist gaol and how prison staff have withdrawn from accommodation areas and terrorists run those areas. This is done through sheer intimidation and terrorism.
- At one stage they didn't conduct musters or headcounts of the prisoners for a period of 184 days and had little idea of what prisoners were there. The terrorist leaders would report to the Management that the counts were correct.
- There's great concern that anything could happen in the gaol, particularly with the IRA who have an effective propaganda machine which causes violence to explode in the community.
- Numerous escape attempts, including well over 40 tunnels detected. Tunnels are generally detected by aircraft infra-red equipment.
- The inmates conduct their own paramilitary ceremonies.
- One advantage that HMP Maze and HMP Maghaberry have is the ability for military intervention in such escapes at short notice. In particular, military helicopters are available and generally conducting operations in the skies near those gaols.
- We were shown the SOP for Operation Rogue Elephant, as it is known throughout Britain which is an aircraft assisted escape.
- We are told there are also two (2) British Tornado aircraft on 24 hours stand-by.
- The other risk factor is that they are only 5-10 minutes flying time from the Republic of Ireland and out of British airspace.
- All Prisons in England and Northern Ireland do a pat search of all persons entering the gaol, including their own staff.

FRANCE

Monday 30 August - Ministère de la Justice Head Office in Paris CBD

On Monday 30 August Superintendent Kelly and SCO Doyle met with Ministère de la Justice officials in Head Office and spoke with the head of the Inspectorate. Inmate population in France is 55,000 prisoners, with an incarceration rate of 1 prisoner per 1,000 of the population.
There were helicopter assisted escapes from French gaols in 1981, 1986, 1992 (3 x helicopter escapes involving 9 inmates) and most recently there was another escape by helicopter from Baumettes Prison in Marseille in June 1999.

There were a number of attempts in 1992, including one during which the pilot was injured by rifle fire and was left a paraplegic. In that incident the helicopter was lowered into a very small confined yard, the pilot had been hi-jacked.

In 1990 there was an attempt at Nice, which failed as inmates were exercised at random times and in different yards. The escape failed as the inmate who was to escape could not be located.

There is an aircraft ceiling height over French gaols of 500 metres.

Monday 30 August 1999 - Le Sante Prison, Paris

Location:

Paris.

Gaol Design:

- The layout is 3 tiered accommodation units, 4 perimeter towers, covering 3 hectares.
- It is 19th century construction, 136 yrs old.
- The Le Sante Prison currently houses 1200 inmates.
- It is maximum security remand centre and also houses inmates with less than 1 yr left to serve.
- It is an infamous prison, housing amongst others, "Carlos the Jackal".
- The inmate exercise yards are covered with anti-helicopter wires strung roof to roof.
- High Security area where "Carlos the Jackal" is held is an isolation area (no contact with other inmates). Inmates housed in this area are only allowed exercise in yards that are covered with grilles (about the strength of what our segregation yards would be), and wire mesh.
- Considering the old structure of the gaol and the number of inmates, surprising to find little incidents of violence in comparison to NSW. The last DIC relating to violence was over 2 years ago however there has been 3 DIC's by suicide in 1999.
- The external perimeter wall was made from 19th century masonry - 9 metres high.
- A second wall creating the sterile zone is 6 metres high.
- Catenary wires about a metre above the external perimeter wall height.
- There have been quite a large number of terrorist inmates housed in this gaol over the years, including members of the Red Brigade, the IRA etc. The management plan for such prisoners was to regularly move them to different gaols.
Gaol routine:

- 3 hours out of cells each day, not including visits or working.
- Harsh discipline regime - Governor can sentence an inmate up to 48 days pound in pound cells with no amenities such as TV etc.
- All French helicopter escapes have been by hijacked pilots, except one where an inmates girlfriend learned to fly a helicopter specifically to execute the escape. During that escape she threw him down a grappling hook and rope and he used that to scale on to the roof where she was hovering. The escape was made good from the roof.
- The priority of French strategy in relation to anti-helicopter extractions is preventing the helicopter landing and directing any force at inmates to stop them reaching the helicopter. They won't fire on the helicopter.
- French have conducted trials trying different helicopter defences such as smoke screens, chemical agents etc. and found that the smoke screen wasn't effective, concluding that the use of wires and force are the most efficient defences and deterrents.

Tuesday 31 August - Baumettes Prison, Marseille

Location:

Marseille, south of France.

Gaol design:

- Baumettes Prison was built in 1936.
- Consisting of stone structure containing 2 stone perimeter walls 7.5m high.
- Has very few camera's except for limited numbers on the perimeter which also has 7 armed towers.
- Baumettes was built for 1450 inmates but can house up to 2,000 inmates (with overcrowding).
- The inmate population at the time of the visit was 1850 inmates, including approximately 250 women.
- Population is roughly a 50/50 mix of remand and short sentence inmates. Also currently houses a large number of sentenced inmates awaiting transportation to sentenced prisons.
- Accommodation blocks are 4 and 6 landings high.
- 6 landing blocks were only built 10 years ago but don’t appear to be any different to the older accommodation blocks.
- Helicopter prevention devices were installed in 1992, including poles approximately 40ft high (if not higher), supporting kevlar cables strung to accommodation blocks, especially the 6 landing high block.
- Where cables are attached to accommodation the blocks, the last 8ft is heavy steel cabling joined to the kevlar cable.
- In the segregation areas inmates are exercised for only one hour in very small yards. The roof has camera observation, bars on the roof with mesh 2ft above the bars.
Prior to mesh being installed there was an extraction attempt from these yards. Two inmates were in the yard. A helicopter flew in and dropped firearms into the yards. The helicopter dropped lines into the yards and inmates tied the lines onto the grilles above the yard. The helicopter then attempted to pull the grilles out of the roof of the yard. The helicopter spent some 25 minutes at the gaol trying to dislodge the roof of the yard. The escape was unsuccessful and the helicopter ended up leaving without any prisoners on board, probably due to low fuel level. Authorities used police dogs to approach the inmates in the yards and they surrendered peacefully.

Officers don’t occupy the yards whilst occupied by inmates - they have small observation boxes perched above the yards attached to the accommodation blocks.

Each accommodation block has a small control room manned by one officer which operates gates.

The prison was quite dirty, massive amounts of rubbish being thrown out of cell windows by inmates. Le Directeur explained that is was a problem with remand inmates. This appeared to be a hygiene problem with a lot of food on the ground.

Despite this staff morale seemed to be very high. Staff to inmate ratio is close to 3/1.

Gaol Routine:

- French prisoners wear their own civilian clothing and remand inmates send their clothing out to their families where they can to be laundered.
- Inmates spend 4-5 hours out of cells per day. The short time out of cells is due to a shared yard arrangement.
- Only 20 - 25% of inmates are employed.
- All inmates meals are taken in the cells.

Escapes by helicopter:
There has been a number of helicopter escapes and attempts, most recently in

YARD 5 WHERE 5 INMATES WERE EXTRACTED BY HELICOPTER IN 1999
SPORTS FIELD WHERE HELICOPTER LANDED ALLOWING INMATES TO BOARD
June 1999. Helicopter wires existed at the time of this escape, strung about 5m apart from poles, buildings and walls.

The escape in June 1999 was from a fairly small yard, half the size of the large yards at the MRRC where the helicopter flew in from the ocean side with mountains located very close to the prison used as cover (similar topography to Lithgow).

The helicopter hovered over the yard, dropped a number of firearms into the yard, which prisoners seized, then dropped two lines with a number of roping harnesses. 5 inmates got into the harness. The helicopter was having difficulties balancing due to the disbursement of inmate weight. It lifted them up above the wires above the yard and 4 towers opened fire on the inmates. The helicopter then flew a short distance and landed again inside the prison on the sports field which had no wires. Inmates appeared to be wounded at this stage and it is not certain whether one inmate was already dead but he was unable to climb on board the helicopter so he was tied on to the end of the line by his feet. The helicopter then flew away. There was a pursuit by the Police and one more inmate was wounded, leaving a total of one unscathed, three wounded and one dead. The reaction in the gaol was similar to that at the MRRC in that inmates began to cheer until the Officers started to fire. That changed the whole mood of the escape which was generally considered unsuccessful by the inmate population and the staff.

The Officers involved in the shooting of the escapee were rewarded with transfers to areas in France of their choice.

Thursday 2 September - Val de Reuil Prison

Location:

One hour out of Paris in the Normandy area.

Gaol design:

- Val de Reuil Prison was built in 1989 and recently celebrated its 10 year anniversary.
- Houses sentenced inmates.
- The capacity is for 800 divided into 2 areas. One area holds inmates with 7 or less years remaining. The other area holds inmates with 7 plus years remaining.
- Between the 2 areas there is an Industries Section, employing 350 inmates in 4 different business units. 3 of those business units are privately owned/operated.
- The accommodation blocks were unusual, being circular in shape, 5 landings.
high, divided into 2 landings, with mezzanine level on top, which contained 25 inmates.

- One officer looked after each area housing 25 inmates.
- All exercise yards and the large sports field were covered with helicopter wires.
- These were strung from concrete poles 12-15m in height. All kevlar cables, criss-crossed, each forming a net shape of differing heights.
- The prison was fairly unusual in that it has 7 different access points in total, for vehicular traffic, trucks going into the Industries Area and a main entry for administration. The administration there said that this was a very costly exercise having so many entry points in relation to staffing, metal detectors etc.
- Movement of inmates around the institution, was similar to Baumettes, achieved via a secure corridor.
- There were very little electronics in the gaol, except some electronically operated gates and cameras.
- Helicopter cables with a strength of 500kg are installed in the centre to strict specifications.
- These cables have been installed in 56 institutions in France. A budget of US$12.5M was allocated in 1994 to install them in a consistent uniform program. This has achieved the most comprehensive helicopter prevention structures we saw.
- 5 armed towers are on the perimeter, manned 24 hrs a day (except in heavy fogs - they close the towers and put a perimeter response vehicle on, which has a shotgun with rubber bullets).
- Unlike the English and Californian gaols, this gaol had bars on the windows.
- In punishment area they had three different types of bars.
- Bar configuration is narrow, ¾ inch diameter bar with a roll bar in the middle.

Gaol routine:

- Inmate day starts at 7:00/7:30am until 8:00pm at night.
- Cost of inmate meals was 16 francs (A$5) per inmate per day, all cooked within the centre.
- Inmates are also able to purchase food and cook it in within their units.
- At the time of this visit there was only one inmate in isolation for punishment.
- Isolation is very similar to segregation in NSW but with only 1 hrs exercise per day.
- There is a harsh discipline regime. Le Directeur can sentence an inmate up to 45 days in punishment cell.
- Inmates can hire TV’s and fridges for their cells.

Staffing:

- Staffing was approximately 280 custodial.
- Officers are required to work a 35 hr week. Shifts are 7:00am - 1:00pm and 1:00pm - 8:00pm. Night shift is 8:00pm - 7:00am.
**Friday 3 September - Fleury Mérogis Prison**

**Gaol design:**

- Complex comprising of three prisons, housing 5,000 inmates in total.
- One is a young offenders prison that takes male inmates 13-18 years old and 18-21 years old. One houses female prisoners.
- The one we visited was the main centre, housing 50% remand inmates and 50% sentenced inmates (although it was meant to be remand inmates).
- The complex is set on 180 hectares of land.
- The perimeter wall is unusual as it includes workshops and offices and comprises a basic hexagon shape.
- There are 5 towers on the perimeter.

Fleury Mérogis has 5 accommodation units which have their own Directors. They are 4 storeys high shaped in a "Y" configuration each designed to carry a capacity of 600 inmates.

- Helicopter wires are strung between buildings, poles and some small tower structures on the top of secure walkways for inmates.
- The wires are kevlar but seem to be a lot thinner than those used at Val de Reuil Prison.
- 2 squadrons of Gendarmes are used to intervene in major incidents, perform the escorts and are located on the complex perimeter.

**Gaol Routine:**

- Visits conducted in the central part of the prison with each accommodation block having their own visiting section.
- Remand prisoners again responsible for throwing a lot of food/rubbish out of cell windows.
- Officers stations are heavily fortified with laminated glass and flat steel bars.
- Inmates spend various hours out of cells, depending whether they are employed or not.
- A low proportion of inmates are employed.
- If an inmate is not employed, he can come out of his cell for one hours exercise in the yard in the morning and one hour in the afternoon.
- Use of exercise yards is taken in turns.
• Inmates who are not working, involved in programs or exercise periods, are locked in their cell.
• Officers don’t go into the yard with the inmates when they’re doing exercise but there is a gallery next to the yard for observation.

SUMMARY:

Each jurisdiction was considered in relation to helicopter extraction prevention strategies and structures. All were different in their approaches but without exception, all had either structures or armed post as a deterrence. The following are the dominant defences at each jurisdiction;

Summary of Californian anti aircraft escape strategies

Although no physical barriers existed, the absence of any helicopter escapes or attempts is attributed to the six armed posts overlooking each exercise yard. Roofs are inaccessible to inmates.

California has a policy that aircraft are not to be fired upon, but force, including the use of firearms can be used to prevent an inmate from approaching an aircraft.

Californian prisons reflect the American ‘gun culture’ with inmates being shot not a rare event.

The reliance on numerous armed posts and their regular use has created an environment where it is considered a helicopter extraction would fail.

Summary of Canadian anti aircraft escape strategies

Kent Institution experienced a helicopter extraction in 1992 despite having armed towers. The following investigation revealed that at least one armed tower had the opportunity to fire at the escaping inmates but failed to do so.

Since the escape, Canada has taken no further steps to prevent helicopter extractions other than to maintain armed post observation of inmate exercise areas and adopt a policy of not directing force towards aircraft but directing it at inmates approaching any aircraft.

Summary of England’s anti aircraft escape strategies

After experiencing a successful helicopter extraction, all English maximum security prisons installed catenary wires. However, there appears to be no uniformity or specifications in their installation. Certainly, the distance between the wire in some locations would allow a helicopter to land and take off, particularly with the aid of easily seen orange spheres on the wires. The materials used, although cost efficient in installation, create maintenance issues.

Although no armed deterrence exists, the combination of catenary wires and the
this year demonstrated the ease with which such an escape can be achieved and this remains in the minds of many inmates.

RECOMMENDATIONS:

1. That a series of kevlar cables be installed consistent with the French specifications at maximum security centres with the priorities being the MRRC and Lithgow Correctional Centre.

2. That an armed tower be constructed at the southeast corner of the MRRC sports field to be staffed whenever inmates occupy the sports field.

3. That consideration be given for a similar armed post at Lithgow Correctional Centre as that recommended for the MRRC.

4. That anti climb devices such as electric fences or razor tape be installed at the MRRC to prevent inmate access to roofs.

5. That a clear policy be adopted in regard to the use of force during an aircraft intrusion into a correctional centre. Such a policy must specify that staff are not to discharge a firearm in a direction that may endanger an aircraft but are to direct any force required at preventing inmates from boarding an aircraft.

6. That liaison and education continue between the department and the aviation industry.

7. That Capital Works Branch establish a liaison and possibly a Memorandum Of Understanding with the Police Scientific Development Branch of the Home Office in Great Britain to benefit from their evaluations of security equipment and structures.

B.R. Kelly
Superintendent

J. Doyle
Senior Correctional Officer