

U.S. Dept. of Commerce  
Emergency Planning and Public Safety Div.  
Office of Spectrum Mgt.  
1212 New York Ave. NW. Suite 600B  
Washington, D.C. 20005  
Attn: Richard J. Orsulak

Re: Prisoners and Cell Phones

Dear Mr. Orsulak

When good guys get trumped by the bad guys, I get angry. I can understand how a prisoner can get a cell phone smuggled into a prison. What troubles me is that the prisoner can use it without being detected.

Technology exists that can put an end to a "con" using a cell phone in a prison setting.

The cell phone is a RADIO. It is possible to locate and intercept cell phone conversations, and to pinpoint the location of the cell phone within a few yards.

During the Korean War, I was a 'radio intercept operator' in the United States Air Force Security Service. I intercepted radio signals from other countries. By a process known as triangulation, the location of the radio can be determined. By triangulation, the location of a cell phone can be determined. (See Attachment)

Columbian military men brought down Pablo Escobar. He was tracked down to a specific apartment in a large city. He was talking to his mother on a cell phone. His cell phone was his death warrant.

Saddam Hussein's two sons were killed when they foolishly used their cell phones. American signal intercept teams probably could not believe their luck when those two jerks called for a pizza.

So, if the technology to locate a cell exists, why are prisoners acquiring cell phones and using them? Escobar and the Hussein boys were tracked down in a large city. How much easier would it be to locate a cell phone in an area as limited as a prison or a prison cell? A good radio intercept team could find a cell phone in a prison quite easily.

I am speaking of old radio intercept technology. Today, radio intercept is probably done with a hand held device. Since I was in uniform, there are probably many advances that have been made in the communications field. I am sure that today's military, FBI, CIA, and NSA all have the hardware necessary to intercept cell phone signals. Bureau of Prison personnel should be given security clearances, and should be trained in the use of radio intercept hardware. To allow prisoners, (State and Federal) to acquire and use cell phones to commit new crimes, is intolerable. Federal agencies have

the answer to this problem. If they share their expertise, the problem will be solved. If the military or federal agencies share their knowledge and hardware with prison authority, this gateway to the outside can be slammed shut in prisoner's faces.

In Texas, a death row prisoner had a cell phone smuggled into the prison by his mother. He used the phone to intimidate citizens who were witnesses against him in his trial. This criminal conduct could have been averted if the phone could have been located and confiscated the first time he turned it on. There is no excuse for failing to protect the citizen from an incarcerated prisoner, especially one on death row.

### Blocking

Another technique that the military uses to disrupt enemy radio traffic is by "blocking" or "jamming".

Cell phone signals can be made unintelligible by blocking the telephone band frequency with an overriding powerful signal called noise. Cuba used it for years to block "Radio Free America" from reaching the Cuban people. In a closed area, such as a cellblock, it should be easy to block cell phone transmissions.

### Frying the Fones

A cell phone is a delicate electronic instrument. I am not an engineer, but I suspect that if a cell phone were exposed to a burst of microwave energy, it would not be good for the phone. If the prisoners hide the phone in their cells, and, when the prisoners are not present, if a portable microwave device could "sweep" the cell with high frequencies, perhaps it would render the hidden cell phone inoperable.

### Recharging the Cell Phone

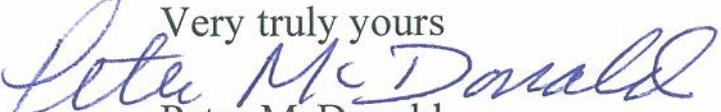
Cell phones need to be recharged. A charging unit is plugged into an electrical outlet that generates 120 volts of alternating current. A cell phone charger converts the 120 volts of alternating current into single digit volts of direct current.

I don't have the answer, but I would bet the rent that an electrical engineer could devise a device that could pinpoint cell phone chargers plugged into electrical outlets. If you know the outlet, you know the cell.

### The Cell Window

Anyone who has tried to make a cell phone call in a building made of concrete and steel, knows that the best reception can be obtained near a window or door. Any inmate, who wishes to make a call, would probably make it at night, standing by the cell window. A Bureau of Prisons employee could sweep the cell windows with night vision glasses and detect the prisoner making a call

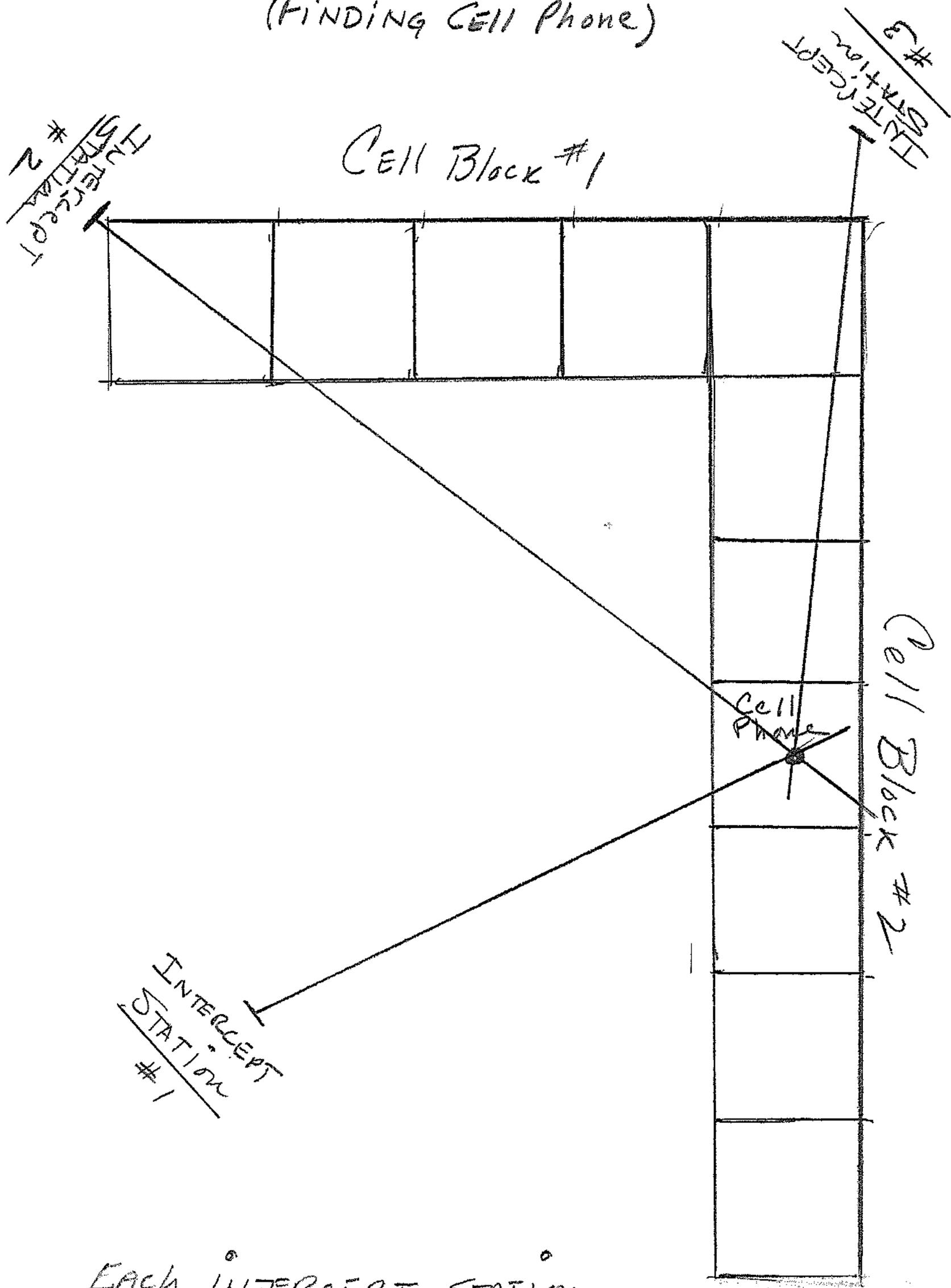
I hope that my ideas bear fruit. I hope that somehow, somewhere, cell phones can be kept out of the hands of prisoners. If I can amplify on any of the ideas cited above, do not hesitate to call on me.

Very truly yours  
  
Peter McDonald  
(661) 310-0411

P.S. I am sure there are Constitutional restrictions on "Blocking" cell phone signals. However, a cell-block can be jammed, leaving the rest of the prison complex unaffected. If a guard wanted to make a call or a 911 call, all he/she has to do is step outside the cell block

cc.Edward Drocella  
Spectrum Engineering and Analysis Division

TRIANGULATION  
(FINDING CELL PHONE)



Each INTERCEPT STATION determines the direction of the Cell Phone's strongest signal. Then by drawing straight lines on a map of the cell blocks, the Cell Phone can be pinpointed.