EX PARTE OR LATE FILED

DOCKET FILE COPY ORIGINAL

ORIGINAL

AIRTOUCH™
Communications

The new name for PacTel

Kathleen Q. Abernathy
Vice President
Federal Regulatory

AirTouch Communications
1818 N Street N.W.
Washington, DC 20036

Telephone: 202 293-4960
Facsimile: 202 293-4970

April 28, 1994

DOCKET FILE COPY ORIGINAL

RECEIVED
APR 28 1994
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

EX PARTE

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

RE: PP Docket 93-61
Automatic Vehicle Monitoring Systems

Dear Mr. Caton:

On Thursday, April 28, 1994, Peter Knight and I, on behalf of AirTouch Teletrac, met with Rudy Baca, legal advisor to Commissioner Quello, regarding the Automatic Vehicle Monitoring issues being addressed in the proceeding indicated above. We discussed the information set forth in the attached documents. Please associate this material with the above-referenced proceeding.

Two copies of this notice were submitted to the Secretary of the FCC in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Please stamp and return the provided copy to confirm your receipt. Please contact me at 202-293-4960 should you have any questions or require additional information concerning this matter.

Sincerely,

Kathleen Q. Abernathy

Kathleen Q. Abernathy

Attachment

cc: Rudy Baca
Rosalind Allen

No. of Copies rec'd 0+2
List ABCDE

AIRTOUCH TELETRAC FCC PRESENTATION
APRIL 28, 1994

OVERVIEW

- **Teletrac is in commercial operation today in:**

-	Los Angeles	(3½ yrs)	-	Houston	(1½ yrs)
-	Detroit	(2½ yrs)	-	Dallas/Ft. Worth	(2 yrs)
-	Chicago	(3 yrs)		Miami	(2 yrs)

- **Services are:**

Consumer	Commercial
Stolen	Fleet Management
Emergency Roadside	Panic
Future Peace of Mind Location	Trailer
Remote Door Lock/Unlock	Status Messaging
Mobile Yellow Pages	Stolen
	Law Enforcement

COMMERCIAL MARKET

Today's Services

Panic Button

- **Silent alerting of emergency (e.g., hijack)**
- **Workstation indicates panic alert. If off-line, Teletrac notifies customer**
- **Installed in cab: floor, gear shift, dash, etc.**
- **Remote panic for drivers that leave vehicle**

Trailer

- **Portable or hidden unit installed on trailer**
- **Motion detector initiates alert on unattached trailer**
- **Door trigger can be used to detect break-in**

Stolen

- **Driver arms vehicle**
- **Unauthorized movement sends alert (punched ignition, hot-wiring, etc.)**
- **If stolen with key, call in location still available [via touch tone telephone]**

LAW ENFORCEMENT USES TELETRAC

- Teletrac's law enforcement customers include:
  - Federal Bureau of Investigation (FBI)
  - Drug Enforcement Administration (DEA)
  - Bureau of Alcohol, Tobacco and Firearms
  - U.S. Customs
  - Los Angeles County Sheriff
  - California Highway Patrol
  - Detroit Police Department
  - Michigan State Police
  - Illinois State Police
  - Many other local law enforcement agencies in Teletrac metro areas
- How do law enforcement agencies use Teletrac?
  - Tracking movements of convicted criminals who may strike again (e.g., child molester)
  - Breaking up chop shops and car theft rings
  - Sting operations by equipping an attractive car with a Teletrac device and watching for possible theft
  - Using Teletrac's history files to link suspects to specific crime scenes

CONSUMER SERVICES

- **Stolen Vehicle**

  -a signal goes off in Teletrac's control center when a Teletrac equipped vehicle is stolen

  -- speed of car
  -- direction
  -- cross street
  -- accuracy to 100 feet

  -Police dispatchers also have Teletrac software
  -Police have apprehended criminals, including car-jackers, using Teletrac
  -100% recovery of car-jacked vehicles
  -93% stolen vehicle recovery

- **Emergency Roadside**

  -Customer pushes button to indicate vehicle problem
  -Vehicle is immediately seen on computer map by Teletrac operator
  -Teletrac sends tow truck and alerts customer that help is on the way
  -Customer never has to leave vehicle

COMMON MISUNDERSTANDINGS REGARDING PART 15 CO-EXISTENCE WITH LMS

- **The purpose of this proceeding is to finalize the rules for LMS, not Part 15**

  No change in the legal standing of devices operating under part 15 rules is warranted

- **Part 15 can continue to operate in the entire 902-928 MHz band on a secondary basis as they do today under existing rules.**

  Need to tolerate interference from licensed services

  Must not cause harmful interference to licensed services

- **Interference incidents to date have been isolated and few**

- **LMS systems co-exist with Part 15 devices today, providing real world data on compatibility**

LMS RULEMAKING IS IN THE PUBLIC INTEREST

- **Competing demands between LMS and part 15 users for 902 - 928 MHz band can be accommodated**

- **Part 15 devices co-exist with today's LMS systems and will co-exist in the future**

  All major LMS providers agree on their ability to co-exist with part 15

- **LMS systems employ techniques designed to tolerate interference from Part 15 devices**

  Spread spectrum
  Receiver site redundancy
  Error control coding
  Retry protocols

- **Part 15 advocates have overstated potential for interference and impact on part 15 users**

FINAL LMS RULES WOULD STABILIZE THE ENVIRONMENT FOR PART 15 USERS

- **Potential for interference would be reduced in most of the spectrum by limiting LMS to 10 MHz.**

- **"Harmful interference" to LMS systems would be defined**

- **Part 15 manufacturers would be able to design for a known environment**

- **Part 15 coalition is actually seeking a fundamental change in the FCC's treatment of unlicensed frequency use**

  Part 15 manufacturers agree to operate without causing interference when they accept registration of their devices

  Now they seek co-primary use with part 90 licensed services and removal of the existing part 90 service to other bands

  Trend toward long-distance communications over unlicensed radio systems.

TELETRAC SHARING PROPOSAL AND PART 15 ISSUES

- New proposal decreases the spectrum allocation intended for wide area multilateration systems (such as Teletrac) from 16 MHz to 10 MHz and allows two systems to share the spectrum within each service area

- All wide area multilateration systems will be located at one end of the spectrum thus freeing 16 MHz for narrowband systems and Part 15 devices

- Even assuming there is increased possibility of interference between Part 15 and wide area systems as more systems are deployed, by locating wide area providers at one end of the band, Part 15 can target their future devices to operate in the rest of the spectrum

- This approach best balances all of the competing interests by implementing a sharing scheme that allows multiple users to operate in congested spectrum

SPECIFICS OF SHARING PROPOSAL

- Must adopt minimum sharing rules for wideband LMS systems to provide sufficient certainty to allow widespread deployment of these services

- The sharing rules consist of:

  - Time synchronization for "housekeeping" transmissions in the return (mobile-to-base station) link;

  - Allocation of separate spectrum for forward link signals to avoid service degradation; and

  - The first two wideband LMS systems to construct and operate would receive co-channel protection.

SPECIFICS OF SHARING PROPOSAL

- **Sharing proposal technically feasible with two providers of wideband LMS systems because it is limited to reverse channel sharing.**

- **Since reducing amount of spectrum available for wideband systems, need contiguous wideband forward link to maintain system flexibility, reduce infrastructure costs and preserve service quality and stimulate innovation and competition.**

- **At a minimum, must grandfather existing systems (including units in production) if force relocation of forward links**

- **Forward links should be licensed for 250 KHz per system for a total of 500 KHz at 924.89-925.39; this preserves existing consumer and service provider investment (tens of thousands of units in use already in this spectrum).**

- **No need to worry that there will be lack of competition for vehicle location services because in addition to the two wideband systems, there will be competition from GPS, Lojack type homing devices and new location technologies in PCS spectrum.**