

Automatic Location Identification

A Brief Study of its
Anatomy,
Behaviors,
Habitat,
and Peculiarities

Prepared by;

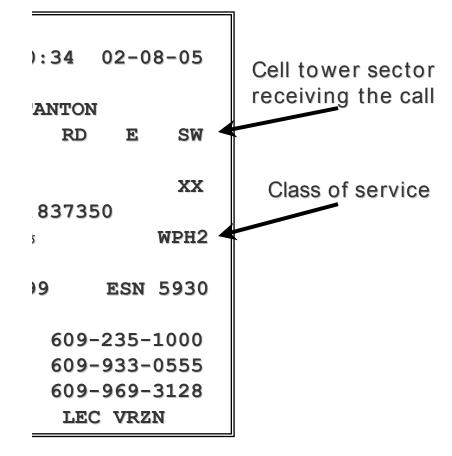
Charles W. Mars
Office of Information Technology
Office of Emergency Telecommunications Services
200 Riverview Plaza
Trenton, NJ 08625-0212
(609) 633-0444
E-mail charles.mars@oit.state.nj.us

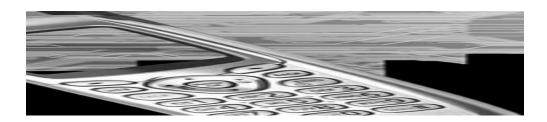


In order to best understand the ALI one must consider its dependence on the telephone. Early telephone was large, cumbersome and monochromatic. While over the years they did develop shapes, sizes, colorings and other abilities the one facture they could not overcome was their lack of mobility. Telephones tended to remain relatively stationary, usually perched on wide flat expanses. Appendages called "wires" restricted their ability to roam outside of their native habitat. A few did develop extremely lengthy "wires" in an apparent evolutionary attempt to "move about". Individuals that displayed these traits usually proved to be more of a hazard to those around them by interfering with the ability of others to move about in the same territory. Encounters such as these usually resulted in the telephone sustaining internal trauma and/or severed appendages.

This lack of mobility made the job of the ALI relatively easy and straightforward once the initial domain of the telephone in question was determined.

Phase 2 ALI





Wireless

Type of wireless call

Caller's phone number

Cell tower address

26

Approx. coverage area

Latitude & Longitude of Caller

Area of uncertainty and percentage of confidence

Cell sector routing number

WRLS PH2
804-789-2345 09:30
VERIZON WIRELESS
506 ST

RADIUS 03 MILES WILDWOOD CREST +038.96503 -074. UNC:0000100 67%

ESRD # 609-511-419 WILDWOOD CREST PD F1=NJSP PKWY F2=NJSP BUENA F3=WILDWOOD CITY



856-783-7626 10:30:34 02-08-06 MAYER OTTO H 000604 **CUMBERLAND** s ST MAGNOLIA BORO NJ FLR RESD PILOT # 609-783-7626 ESN 0182 CAMDEN COUNTY COMM CENTER 856-783-4900 MAGNOLIA PD 856-783-4444 MAGNOLIA FD 856-783-4444 MAGNOLIA EMS LEC VERZN

3

Key Points to Identify

The "Warning Line"

The caller's phone number and the number the account is billed to.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

856-858-7626 10:30:34 02-08-06 FLANAGAN ROBERT 000210 CRYSTAL LAKE AVE W HADDON TWP IJ APT 262-A FLR RESD PILOT # 609-858-7626 **ESN 1387** CAMDEN COUNTY COMM CENTER 856-783-4900 HADDON TWP PD WESTMONT FD 856-783-4444 WESTMONT EMS 856-783-4444 LEC CAVLR

Key Points to Identify

The "Warning Line"

The caller's phone number and the number the account is billed to.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

Type of screen

```
*VOIP VPC CALL*
866-866-5006 08:24:34 09-26-07
ONSTAR CALL CENTER
ONSTAR
                  CALL VERIFY
LOCATION
ELIZABETH
                              IJ
+040.663633 -074.20611
UNC:0000100
              95%
                           VOIP
ESRD # 732-211-3282
                        ESN 0115
ELIZABETH POLICE
ELIZABETH POLICE 908
                       558-2083
                  908
                       558-2083
ELIZABETH FIRE
ELIZABETH AMBLSVC 908
                       558-2083
                      LEC TCS
```

Key Points to Identify

The "Warning Line"

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

VOIP VPC CALL 866-866-5006 08:24:34 09-26-07 ONSTAR CALL CENTER ONSTAR CALL VERIFY LOCATION **ONSTAR** NJ UNC: VOIP ESRD # 732-211-0824 ESN 0054 OLD BRIDGE POLICE OLD BRIDGE POLICE 732 721-4000 MADISON PARK FIRE 732 721-4000 732 721-4000 OLD BRIDGE FA LEC TCS

Key Points to Identify

The "Warning Line"

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

Type of screen

CAUTION PAY PHONE 856-435-9626 10:30:34 02-08-06 PORT AUTHORITY TRANSIT CORP 000200 BERLIN ROAD R/O ENTR DWNSTRS LINDENWOLD BORO NJ BLDG LNDWLD STA CORNER BE COIN PILOT # 856-435-9626 ESN 0166 CAMDEN COUNTY COMM CENTER LINDENWOLD PD 856-783-4900 LINDENWOLD FD 1 856-783-4444 856-783-4444 LINDENWOLD EMS LEC VERZN

Key Points to Identify

The "Warning Line"

The caller's phone number and the number the account is billed to.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

CAUTION PBX CALL 856-768-7626 10:30:34 02-08-06 CAMDEN COUNTY VO TECH SCHOOL 001400 BERLIN-CROSSKEYS ROAD ERIAL GLOUCESTER TWP IJ FLR **BPBX** ESN 0182 PILOT # 609-768-7600 GLOUCESTER TWP POLICE GLOUSTR TWP PD 856-227-1900 ERIAL FD 856-783-4444 856-783-4444 ERIAL EMS LEC CNGLR

Key Points to Identify

The "Warning Line"

The caller's phone number and the number the account is billed to.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

Type of screen

VOIP VPC CALL 856-342-3426 08:24:34 03-26-06 TAYLOR STEPHEN 000000017 B WILLOW WK CAMDEN CITY NT+039.910871 -075.110794UNC:0000100 95% VOIP ESRD # 856-211-1000 **ESN 1377** CAMDEN CITY PD F1=CAMDEN CITY PD 856 757-7400 F2=CAMDEN CITY FD 856 757-7400 F3=CAMDEN CITY EMS 856 783-4444 LEC INTRA

Key Points to Identify

The "Warning Line"

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

```
*VOIP VPC TIMEOUT-REBID*
856-211-1000 09:30:34 02-08-05
VONTAGE
000000001
               VOIP
                       ST
CAMDEN CITY
                               NΤ
VOIP SHELL RECORD
UNC:
                             VOIP
ESRD # 856-211-1000
                         ESN 1377
CAMDEN CITY PD
F1=CAMDEN CITY PD 856
                        757-7400
                        757-7400
F2=CAMDEN CITY FD 856
F3=CAMDEN CITY EMS 856 783-4444
                      LEC INTRA
```

Key Points to Identify

The "Warning Line"

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

Type of screen

One day a telephone appeared that had no wires. Its first attempts to function proved frustrating and difficult and it existence was short. But soon others followed. And with each generation they improved their abilities and proliferated until they began to encroach on the existence of their "appendaged" relatives. At first, ALI could not function with these. The refusal of these newcomers to remain stationary thwarted all of its attempts to exist in the harmony it had developed with the older telephones. ALI needed to evolve too. Gradually the ALI developed additional functions such as GPS, MPC, MSC, PDE, and the all-important ESRD. These helped the ALI adapt to the changes in the environment thrust upon it by the evolving "wireless" telephone. A balance was slowly coming about when a new form appeared. Known as the "computer", this newcomer formed a symbonic relationship with the "wired" telephones by sharing some of its abilities to communicate but otherwise remained aloft from the day-to-day functions.

Soon it was observed that some "wired" telephones were developing new appendages. These became know as "cables". Telephones then attempted to use these new appendages to interface directly with the computer apparently to avail itself of the computer's communication abilities. As they learned to coexist more telephones were seen connecting to computers and forgoing their older means of communication.

Once again, the ALI was unable to participate in this new aspect of the telephones existence. It would have to continue to evolve.

WRLS PH1 804-789-2345 09:30:34 02-08-05 VERIZON WIRELESS 000000088 **DENNISVILLE** RD ΝE RADIUS 05 MILES MIDDLE TWP XX +039.073200 -074.492600UNC: 용 WPH1 ESRD # 609-511-4000 ESN 5404 NJSP OUD-SOUTH COMM 4 F1=GS PKY BASS RVR 609 295-2031 F2=MIDDLE TWP PSAP 609 465-8700 886-2711 F3=LOWER TWP PSAP 609 LEC VRZWL

Key Points to Identify

The "Warning Line"

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

Type of screen

856-783-5422 14:30:34 02-22-06 REINER CRAIG 0000101 ATLANTIC AVE W LAUREL SPRINGS LAUREL SPRINGS BORO NJ FLR RESD PILOT # 856-783-5422 ESN 1040 CAMDEN COUNTY COMM F1=LAUREL SPRNGS PD 856 783-4900 F2=LAUREL SPRGNS FD 856 783-4444 F3-LAUREL SPRNGS EMS856 783-4444 LEC CMCST

Key Points to Identify

The "Warning Line"

The caller's phone number and the PILOT #.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

```
908-211-6545 05:30:34 02-08-06
VOIP CALLER
0000001
              VOIP CALL
                         ST
ATLANTIC CITY
                               NΤ
              FLR
                             RESD
PILOT # 908-211-6545
                         ESN 0016
ATLANTIC CITY
F1=ATLANTIC CITY PD 609 235-1000
F2=A C FIRE NO 1 609
                         933-0555
F3-MEDCOM AC MED 609
                         969-3128
                      LEC INTRA
```

Key Points to Identify

The "Warning Line"

The caller's phone number and the PILOT #.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

Type of screen

```
*WRLS PH2*
804-789-2345 09:30:34
                       02-08-05
VERIZON WIRELESS
000000088
                 DENNISVILLE
                    RD
                              ЙE
RADIUS 05 MILES
MIDDLE TWP
                               XX
                          +00000
+039.103440 -074.802620
UNC: 0000150 90%
                             WPH2
ESRD # 609-511-4000
                         ESN 5404
NJSP OUD-SOUTH COMM 4
F1=GS PKY BASS RVR 609
                        295-2031
F2=MIDDLE TWP PSAP 609
                        465-8700
F3=LOWER TWP PSAP 609
                         886-2711
                      LEC VRZWL
```

Key Points to Identify

The "Warning Line"

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

```
*CAUTION* ANI FAILURE
200-911-0906 03:30:34 01-20-06

CARRIER: MCI METRO
SERVING OFFICE:
Piscataway, NJ
PSWYNJ01234

TO CONTACT CARRIER CALL:
1-800-555-1234

LEC MCIM
```

Key Points to Identify

The "Warning Line"

The Carrier's Information.

How to contact the carrier.

Type of screen

```
*CAUTION* 3RD PARTY CONFERENCE
908-250-4699 09:22:34 12-08-05
3RD PARTY CONFERENCE
0000000
          UNKNOWN ADDRESS
UPPER DEERFIELD
                              NJ
PILOT # 908-250-4699
                        ESN 1792
CUMBERLAND COUNTY COMM
                   856
                        235-1000
NJSP BRIDGETON
UD TWP FIRE 3
                   856
                        933-0555
                   856 969-3128
UD TWP EMS
                      LEC
```

Key Points to Identify

The "Warning Line"

The caller's phone number and the PILOT #.

The caller's name

The caller's location

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

WRLS PH2 804-789-2345 09:30:34 NEXTEL WIRELESS	02-08-05	
0000000329 JACKSC)N	
	ST SW	
RADIUS 01 MILE		
HOBOKEN	XX	
+040.730978 -074.069744		
UNC: %	WPH2	
ESRD # 732-511-3283	ESN 5764	
JERSEY CITY PD		
F1=NJSP NWRK 973	235-1000	
F2=NJSP TOTOWA 973	933-0555	
F3=NEW YORK CITY 212	969-3128	
	LEC NXTL	

Key Points to Identify

The "Warning Line"

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

Type of screen

WRLS PH1 911-789-2345 09:30:34 02-08-05 VERIZON WIRELESS 000000655 ABSECON BLVD SE RADIUS 04 MILES ATLANTIC CITY XX +039.371060 -074.430250FLR WRLS ESRD # 609-511-6545 ESN 5935 ATLANTIC CITY PD F1=EGG HRBR CITY 609 235-1000 609 933-0555 F2=PLEASANTVIL F3=AC EXPRESSWAY 609 969-3128 LEC VERZN

Key Points to Identify

The "Warning Line"

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

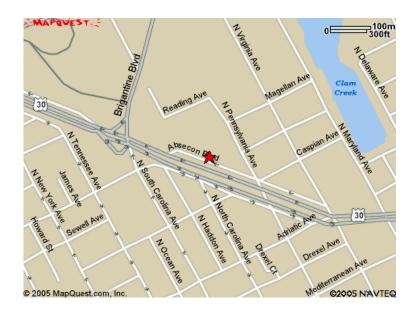
F-1

F-2

F-3

WRLS PH2 LAT/LONG NOT AVAILABLE 609-783-4216 09:30:34 02-08-05 CINGULAR WIRELESS 000000655 ABSECON BLVD SE RADIUS 04 MILES ATLANTIC CITY +039.371060 -074.430250 UNC: WPH1 ESRD # 609-511-6545 ESN 5935 ATLANTIC CITY PD 235-1000 F1=EGG HRBR CITY 609 F2=PLEASANTVIL 609 933-0555 609 969-3128 F3=AC EXPRESSWAY LEC CNGLR

Tower Location



WRLS PH2 804-789-2345 09:30:34 02-08-05 VERIZON WIRELESS 0000004100 ROUTE 9 HWY S SE RADIUS 01 MILES MIDDLE TWNSP +038.955836 -074.762003UNC:0000100 67% WPH2 ESRD # 609-511-4199 ESN 5931 WILDWOOD CITY PD F1=NJSP PKWY 235-1000 F2=N WILDWD PD 609 933-0555 F3=WILDWD CREST 609 969-3128 LEC VRZN

Key Points to Identify

The "Warning Line"

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

WRLS PH2 NO POSITION	SOURCE	
804-789-2345 09:30:34	02-08-05	
CINGULAR WIRELESS		
000000040 SPRINGFIELD		
P	W V	
RADIUS 02 MILES		
SUMMIT BORO	XX	
+040.716083 -074.337528		
UNC: %	WPH2	
ESRD # 732-511-3284 SUMMIT FD	ESN 5784	
F1=NJSP SOMERVILLE 908	235-1000	
F2=NJSP PARKWAY 973	933-0555	
F3=CENCOM 908	969-3128	
	LEC CNGLR	

Key Points to Identify

The "Warning Line"

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

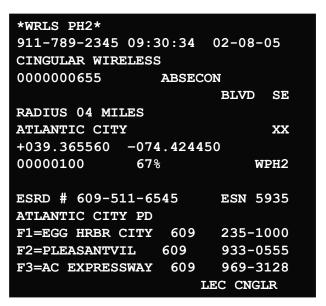
Where will the call be transferred to if you press;

F-1

F-2

F-3

Type of screen



Caller's Location



WRLS PH2 MPC LINK DOW	wn	
804-789-2345 09:30:34 02-08-05		
VERIZON WIRELESS		
0000000296 MIDLANI)	
	AVE NE	
RADIUS 01 MILE		
SADDLEBROOK TWP	XX	
+040.887636 -074.101817		
UNC: %	WPH1	
ESRD # 732-511-3282	ESN 5902	
BRGN CO-SDL BRK 201		
F1=SDLE BRK PD 201	235-1000	
F2=NJSP PKWY 973	933-0555	
F3=NJSP TOTOWA 973	969-3128	
	LEC VRZWL	

Key Points to Identify

The "Warning Line"

14

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3

Type of screen

WRLS PH2	
804-789-2345 09:30:34	02-08-05
VERIZON WIRELESS	
0000000012 CORKHII	L
I	RD SW
RADIUS 02 MILES	
FRANKLIN BORO	XX
+041.096197 -074.60816	51
UNC:0000100 90%	WPH2
ESRD # 732-511-3283	ESN 5462
SPARTA TWP PD	
F1=NJSP TROOP B 732	235-1000
F2=PHILLIPSBERG 908	933-0555
F3=PENNSYLVANIA SP 610	969-3128
I.	EC VRZN

Key Points to Identify

The "Warning Line"

The caller's phone number and the ESRD.

The caller's name

The caller's location

The "Class of Service"

The PSAP designated to receive the 9-1-1 call

Selective Transfers

Where will the call be transferred to if you press;

F-1

F-2

F-3