

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK

-----X  
THE CIVIC ASSOCIATION OF THE DEAF OF :  
NEW YORK CITY, INC. (also known as :  
the New York City Civic Association :  
of the Deaf) and STEVEN G. YOUNGER II, :  
on behalf of themselves and all :  
others similarly situated, :

Plaintiffs,

95 Civ. 8591 (RWS)

V.

RUDOLPH GIULIANI, as Mayor of the  
City of New York, HOWARD SAFIR, as

Commissioner of the Fire Department  
of the City of New York, CARLOS  
CUEVAS, as City Clerk and Clerk of  
The New York City Council, PETER  
VALLONE, as Speaker and Majority  
Leader of the New York City Council,  
THOMAS OGNIBENE, as minority Leader  
of the New York City Council, and  
the CITY OF NEW YORK,

Defendants.  
-----X

**CORRECTED  
DECLARATION OF  
ROBERT B. STULBERG  
IN SUPPORT OF  
PLAINTIFFS'  
OPPOSITION TO  
DEFENDANTS' MOTION  
TO VACATE OR  
MODIFY INJUNCTION**

**EXHIBIT 3**

2 UNITED STATES DISTRICT COURT  
2 SOUTHERN DISTRICT OF NEW YORK  
3 -----x  
3

4 THE CIVIC ASSOCIATION OF THE  
4 DEAF OF NEW YORK CITY, INC.  
5 (also known as the New York  
5 City Civic Association of the  
6 Deaf) and STEVEN G. YOUNGER II,  
6 on behalf of themselves and all  
7 others similarly situated,  
7

8 Plaintiffs,  
8

9 v.  
9

95-CV-8591 (RWS)

10 RUDOLPH GIULIANI, as Mayor of the  
10 City of New York, HOWARD SAFIR, as  
11 Commissioner of the Fire Department  
11 of the City of New York, CARLOS  
12 CUEVAS, as City Clerk and Clerk of  
12 The New York City Council, PETER  
13 VALLONE, as Speaker and Majority  
13 Leader of the New York City Council,  
14 THOMAS OGNIBENE, as Minority Leader  
14 of the New York City Council, and  
15 THE CITY OF NEW YORK,  
15

16 Defendants.  
16  
17 -----x  
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18 March 15, 2011  
18 2:15 p.m.  
19

20 Deposition of PAUL LIVINGSTON,  
21 pursuant to subpoena, at the United States  
22 Courthouse, 500 Pearl Street, New York, New  
23 York, before Samuel Mauro, Jr., a Registered  
24 Merit Reporter and Notary Public of the State of  
25 New York.

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A P P E A R A N C E S:

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605 Third Avenue  
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BY: MARK E. SPUND, ESQ.

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IT IS HEREBY STIPULATED AND AGREED, by  
and between counsel for the respective parties  
hereto, that the sealing and filing of the  
within deposition be waived; that such  
deposition may be signed and sworn to before any  
officer authorized to administer an oath; that  
all objections, except as to form, are reserved  
to the time of trial.

1 13fnlivd Livingston

2 PAUL LIVINGSTON,

3 called as a witness by the Plaintiffs,  
4 having been duly sworn, testified as follows:

5 DIRECT EXAMINATION

6 BY MS. SCHULMAN:

7 Q. Good afternoon, Mr. Livingston. My  
8 name is Amy Schulman. We met a few minutes ago.  
9 I am one of the attorneys for the plaintiffs in  
10 this case in which you have been subpoenaed to  
11 testify during the deposition.

12 I am going to be asking you some  
13 questions today, and if at any point you don't  
14 understand my question, please let me know, and  
15 I will try to clarify it for you. If at any  
16 point you need a question repeated or read back,  
17 just let me know, and either I or the court  
18 reporter will read it back.

19 If at any point you need a break just  
20 let me know, and as long as there is no question  
21 pending, we will be able to take a break.

22 A. OK.

23 Q. Would you please state your business  
24 address.

25 A. 1272 West Main Road in Middletown,

1 13fnlivd Livingston

2 Rhode Island.

3 Q. Are you on any medication that would  
4 interfere with your ability to testify  
5 truthfully today?

6 A. No.

7 Q. Are you on any medication that  
8 interferes with your memory?

9 A. No.

10 Q. Where, if anywhere, are you currently  
11 employed?

12 A. PURVIS Systems, Incorporated.

13 Q. Since when have you been employed  
14 there?

15 A. Since 2001.

16 Q. What is your title?

17 A. Engineering department manager.

18 Q. Have you had any different titles at  
19 PURVIS?

20 A. I was a hardware engineering manager  
21 previous, just prior to that. And I was  
22 previously with PURVIS. I was with PURVIS, I  
23 left, and then I came back in 2001. Prior to  
24 that I was an electrical engineer.

25 Q. What are your current duties at

1 13fnlivd Livingston  
2 PURVIS?  
3 A. I oversee the day-to-day operations of  
4 the engineering department.  
5 Q. Has that been your duty since, the  
6 entire time you have been in your current title?  
7 A. My current title, yes.  
8 Q. When did you assume your current  
9 position?  
10 A. About four years ago.  
11 Q. Do you have a functional title or,  
12 additional title other than the one that you  
13 mentioned earlier?  
14 A. No.  
15 Q. What were your duties in the previous  
16 title you held at PURVIS?  
17 A. Hydroengineering manager. I oversaw  
18 the hydroengineering group. That is a hardware  
19 design function.  
20 Q. Have you had any positions at PURVIS  
21 that you haven't mentioned?  
22 A. No.  
23 Q. During what period of time did you  
24 work at PURVIS before 2001?  
25 A. I was employed there between 1988 and

13fnlivd Livingston

- 1 1995.
- 2
- 3 Q. What titles did you have during that
- 4 period?
- 5 A. That was electrical engineer.
- 6 Q. For the whole time?
- 7 A. Yes.
- 8 Q. Where did you work between 1995 and
- 9 2001?
- 10 A. At the Naval Undersea Warfare Center.
- 11 Q. That sounds interesting. What was
- 12 your position there?
- 13 A. I was an electronic engineer there.
- 14 Q. You were at the Naval Undersea Warfare
- 15 Center from '88 to 95?
- 16 A. No, '95 to 2001.
- 17 Q. I'm sorry, '95 to 2001.
- 18 Have you ever heard of or are you
- 19 familiar with street alarm boxes in New York
- 20 City?
- 21 A. Yes.
- 22 Q. Do you have any responsibilities
- 23 regarding street alarm boxes in New York City?
- 24 A. I oversaw the modernization of the
- 25 Emergency Reporting System, otherwise known as



1 13fnlivd Livingston  
2 ERS and the design of a modernized callbox.  
3 Q. When did you oversee the modernization  
4 of ERS?  
5 A. That would have been 2001, and really  
6 it still goes on today.  
7 Q. You referred to a modernized callbox.  
8 A. Correct.  
9 Q. What did you mean by that?  
10 A. The City purchased a thousand modern  
11 callboxes approximately a couple of years ago.  
12 Q. What were your responsibilities, if  
13 any, regarding the purchase of modern callboxes?  
14 A. Really more of a program manager, to  
15 oversee the effort.  
16 Q. I should say what were your  
17 responsibilities regarding the modern callboxes  
18 that were purchased by the City?  
19 A. Yes. It was project manager, program  
20 manager.  
21 Q. What did you do as program manager?  
22 A. Just oversee the day-to-day design  
23 effort and production of those boxes.  
24 Q. The callboxes that you were referring  
25 to before the modern callboxes were sold, are

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Livingston

1 you familiar with the mechanics of how those  
2 boxes work?

3 A. Yes.

4 Q. Can you describe how those boxes work.

5 A. Sure. The boxes are essentially for  
6 voice communications between a citizen on the  
7 street and a dispatcher, either a fire  
8 dispatcher or a police dispatcher. There are  
9 two buttons; one is for fire, one is for police.  
10 If you depress the police button, you are routed  
11 to a 911 dispatcher essentially. If you press  
12 the fire button, you are routed, your voice is  
13 routed to a fire dispatcher in one of the five  
14 boroughs.

15 Q. Does PURVIS have any responsibilities  
16 regarding maintenance of alarm boxes, whether  
17 modern or premodern?

18 A. Not the maintenance, no.

19 Q. Does PURVIS have any responsibilities  
20 regarding repair of any alarm boxes used by the  
21 City?

22 A. Yes. We repair the boxes.

23 Q. If you know, has that been the case  
24 since 2001?  
25

1 13fnlivd Livingston  
2 A. I don't know. I don't know the  
3 inception.  
4 Q. Do you have any responsibilities  
5 regarding repair of any city boxes?  
6 A. I do not.  
7 Q. How is it that the callbox signals the  
8 Police or Fire Department, depending on the  
9 which of the two buttons is pressed by a caller?  
10 A. Sure. In each of the Fire Department  
11 borough communications offices, there is a  
12 system that receives the signaling within each  
13 borough. The signaling from the box to that  
14 central system carries a code that identifies it  
15 a fire or police call.  
16 Q. How, if at all, does the central  
17 office know which box has been activated?  
18 A. The boxes are on circuits throughout  
19 each borough. So there is a circuit number, and  
20 then each box has an identification code built  
21 into the box. So as the central system decodes  
22 the box number, it knows what circuit it came in  
23 on, so it knows the circuit and box ID, and then  
24 there is a lookup table that says it is at this  
25 address or this box number.

1 13fnlivd Livingston

2 Q. How is information transmitted from  
3 the callbox to the central office via the  
4 circuits to notify the department of the box  
5 number?

6 A. It is a two-frequency communication  
7 protocol. And it is 100 hertz and 140 hertz.  
8 They're essentially used as digital bits, which  
9 encode the box number and whether it is a police  
10 or fire call.

11 Q. What, if anything, does the box do in  
12 response to being activated by the caller to let  
13 the caller know that the box is working?

14 A. Sure. When you push the button, it  
15 will play, the speaker in the callbox will play  
16 what's called a ringback tone.

17 Q. How is that ringback tone activated?

18 A. The electronics in the box itself. As  
19 soon as the button is pressed, there's sort of a  
20 state machine that says, OK, a button is  
21 pressed, I'm ringing the central office, I'm  
22 ringing the central tone.

23 Q. If the box is working, the tone will  
24 always play back?

25 A. That's correct.

1 13fnlivd 12  
2 Livingston  
3 Q. Is the ringback tone on a particular  
4 frequency?  
5 A. 400 hertz.  
6 Q. And for how long does the ringback  
7 tone play?  
8 A. I believe it's on for 3.2 seconds. It  
9 is a sequence, 3.2 seconds on, 3.2 seconds off,  
10 and that will be repeated until the dispatcher  
11 picks up.  
12 Q. Once a dispatcher picks up, how is the  
13 dispatcher's voice communicated, if at all, to  
14 the person using the box?  
15 A. Whenever the dispatcher talks, the  
16 audio will come to the speaker on the box.  
17 Q. Does the ringback tone that you  
18 mentioned also generate any vibration on the  
19 box?  
20 A. Yes. I mean sound in and of itself is  
21 a vibration, so if you hold your hand up to the  
22 speaker grill you can feel the 400 hertz on your  
23 fingers. The button flaps will vibrate as well.  
24 Q. That's I'm talking about, the ringback  
25 tone.  
A. Correct. Yes.

1 13fnlivd Livingston

2 Q. Is that what's known as a mechanical  
3 vibration?

4 A. The button flaps, because the speaker  
5 is mounted to, you know, it's mechanically  
6 attached to the metal frame of the box. It's a  
7 mechanical vibration.

8 Q. So a caller would know that a box is  
9 working either by hearing the ring tone or by  
10 feeling the vibration of the ring tone?

11 A. Sure.

12 Q. Is there also a way to feel the  
13 vibration of the dispatcher's voice coming  
14 through the box?

15 A. Yes. It is the same principle. Sound  
16 is just a vibration, so as long as that voice is  
17 there, you should be able to feel it.

18 Q. Where on the box, just to make sure  
19 we're clear, where on the box would a caller  
20 feel vibration of the ring tone?

21 A. Right on the speaker grill. There are  
22 holes in the front panel where the speaker is  
23 behind, so right there is the optimum place.

24 MS. SCHULMAN: I said I am not going  
25 to mark exhibits but --

1 13fnlivd  
2 Livingston 14  
3 (One-page document, entitled Callbox  
4 Usage, was marked Plaintiff's Exhibit PPPP for  
5 identification)  
6 Q. The only reason we're using this is  
7 for the picture. Do you recognize this picture  
8 as an ERS box?  
9 A. Yes.  
10 Q. Can you point out where on this  
11 picture a person could feel the vibration of the  
12 ringback tone?  
13 A. The white area that's right in the  
14 middle, there is a series of dots, that's really  
15 the speaker grill. That is what I was referring  
16 to earlier. That's the best place.  
17 Q. Could a person also feel the vibration  
18 of the ringback tone on either of the flaps that  
19 are below that speaker grill?  
20 A. Yes. You can also feel it there.  
21 Q. Where, if anywhere, would a person  
22 feel the vibration of the dispatcher's voice  
23 when it comes through?  
24 A. In the same two locations.  
25 Q. You mentioned that you were, I think,  
project manager for the modern callbox sale or

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Livingston

2 you were project manager in connection with the  
3 sale of what you referred to as modern  
4 callboxes?

5 A. Correct.

6 Q. How, if at all, do the modern  
7 callboxes differ from the callboxes that were  
8 used by the City, the ERS callboxes that were  
9 used by the City before the modern callboxes?

10 A. Could you state that question again.

11 Q. I'm just trying to ask -- sorry, it  
12 was a bad question -- how modern callboxes are  
13 different than the callboxes that were, than the  
14 ERS boxes that were in place at the time or just  
15 before the modern callboxes were sold.

16 A. They are a digital design, whereas the  
17 legacy box is an analog design primarily. The  
18 modernized box provides for up to 64 box codes,  
19 whereas legacy only had 32. And it's  
20 essentially a software-based design rather than  
21 a hardware design.

22 Q. Do you know whether the modern  
23 callboxes replaced all of the ERS boxes that  
24 were existing at the time just before the sale?

25 A. I don't know.



1 13fnlivd Livingston  
2 Q. Do the modern callboxes from the  
3 caller's perspective work the same way as the  
4 premodern callboxes?  
5 A. Yes, they do.  
6 Q. Is it accurate to say on the modern  
7 callboxes that once a box is activated a  
8 ringback tone is played?  
9 A. Yes.  
10 Q. The ringback tone is the same as the  
11 ringback tone you mentioned earlier?  
12 A. That's correct.  
13 Q. On the modern callboxes the caller  
14 would be able to feel the vibration of the  
15 ringback tone on the speaker grill you pointed  
16 to?  
17 A. That's correct.  
18 Q. As well as the police and fire button  
19 flaps?  
20 A. Yes.  
21 Q. Do the modern callboxes allow for  
22 two-way voice communication between a caller and  
23 dispatcher?  
24 A. Correct.  
25 Q. A caller on the modern callboxes would

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be able to feel the vibration of the caller's  
voice on the speaker grill?

A. Yes.

Q. And on the police or fire flaps?

A. Correct.

MS. SCHULMAN: Let me see if I have  
anything else. I don't have anything else.

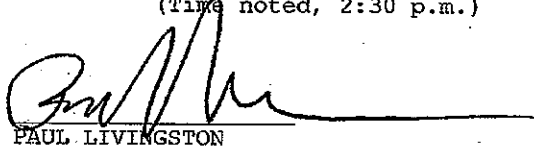
MR. PINES: No questions.

MS. SCHULMAN: Mark, do you have  
anything?

MR. SPUND: Me? No. Off the record.

MS. SCHULMAN: Thank you for coming  
down.

(Time noted, 2:30 p.m.)



PAUL LIVINGSTON

Subscribed and sworn to  
before me this 14<sup>th</sup> day  
of 1<sup>st</sup> April 2011.

*Jeanette J. Gray*  
my commission expires 4/2/15

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Livingston

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CERTIFICATE

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4

STATE OF NEW YORK )

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: ss

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COUNTY OF NEW YORK)

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I, Samuel Mauro, Jr., a Registered  
Merit Reporter and Notary Public within and for  
the State of New York, do hereby certify:

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14

That PAUL LIVINGSTON, the witness  
whose deposition is hereinbefore set forth, was  
duly sworn by me and that such deposition is a  
true record of the testimony given by such  
witness.

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I further certify that I am not  
related to any of the parties to this action by  
blood or marriage and that I am in no way  
interested in the outcome of this matter.

In witness whereof, I have hereunto  
set my hand this \_\_\_\_\_ day of

\_\_\_\_\_ 2 \_\_\_\_\_.

\_\_\_\_\_  
SAMUEL G. MAURO, RMR

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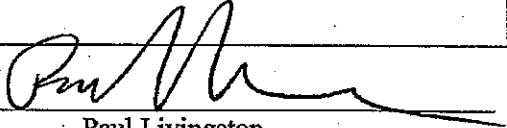
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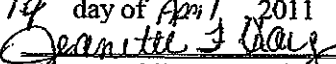


**EBT CORRECTION SHEET**

**DEPOSITION OF Paul Livingston**

Page	Line	Corrections
6	17	Should state "Hardware Engineering Manager"
6	18	Should state "Hardware Engineering Group"

  
Paul Livingston

Sworn to before me this  
 14 day of April, 2011  
  
 Notary Public MY commission expires 4/3/15