

## Engineering | Forensics | Litigation Support | Training

## To Whom It May Concern:

My name is Merton Bunker, PE, CFII, DBIA and I am the President of Merton Bunker and Associates in Stafford, Virginia. I have attained extensive and specialized education, skill, knowledge, training, experience and credentials in the fire alarm industry, UL Standards, NFPA 70 National Electrical Code®, and NFPA 72 National Fire Alarm and Signaling Code®. I hold a Bachelor of Science in Electrical Engineering (BSEE) and a Master of Science in Engineering Management (MSEM). I have 34 years of engineering experience including 7 years at the National Fire Protection Association (NFPA).

From 1994 to 2001, I was employed by the National Fire Protection Association in Quincy MA, where I was staff liaison to NFPA 72 and other NFPA standards. As staff liaison, I was also the co-editor of the NFPA 72 Handbook<sup>®</sup>. Furthermore, I was the Chief Electrical Engineer for the NFPA being responsible for the development of the National Electrical Code<sup>®</sup> from 1998 to 2001. I am the current chair of the NFPA 72 Correlating Committee and serve on the Technical Committee on Protected Premises Signaling Systems. Finally, I have instructed NFPA's fire alarm code seminars since 1994.

I am a licensed professional engineer in eleven (11) states (ME, NH, MA, MD, DC, PA, VA, IN, NC, GA, FL). I am Certified Fire Investigator (NAFI & Pro Board), a Master Electrical Inspector (IAEI), and I conduct forensic investigations.

Against the foregoing backdrop, I have been retained to peer review and technically analyze the Expert Report of Jeffrey D. Zwirn, President of IDS Research and Development, Inc. Upon the conclusion of my analysis, I was retained to provide expert opinions within a reasonable degree of professional, fire alarm science and engineering certainty. As part of my investigation I forensically analyzed and technically reviewed UL-1023, UL-985, UL-365, UL-864- 10<sup>th</sup> Edition, NFPA 70, and NFPA 72. Each of the editions which I relied upon for UL and NFPA Standards are the same editions that Mr. Zwirn has incorporated into the Standards and Codes Matrix Sections of the Zwirn Expert Report. Furthermore, I forensically tested an exemplar single data-bus control panel following the codes and standards referenced in the Zwirn Expert Report.

## **EXPERT OPINIONS:**

1) I technically duplicated, validated and verified what Mr. Zwirn opined with regards to the multitude of dangerous and unreliable "non-conforming" listed equipment which was sold, manufactured and/or installed for the public under the respective listings of UL-1023, UL-985, National Electrical Code and National Fire Alarm and Signaling Code.

- 2) None of the control panel equipment tested complied with the required codes and standards extensively elaborated to in Mr. Zwirn's Expert Report. Consequently, all single data-bus control panels are non-conforming and require immediate recall and/or there needs to be a technical solution which can accomplish the task of ensuring strict compliance with each of the applicable and mandated codes and standards for household and commercial burglar and fire alarm control panels.
- 3) Failure to comply with the equipment manufacturer's specifications and the listings of the control panel violates the National Electrical Code. Until such time that all of the installed and/or manufactured control panels can be redesigned to actually be in compliance with each of the represented and referenced codes and standards as subsumed in the Zwirn Expert Report, the following steps need to be immediately taken:
  - a. Authorities having jurisdiction across the country and around the world need to be put on notice immediately.
  - b. The Consumer Product Safety Commission (CPSC) should be notified of the identified dangers of the non-conforming control panels.
  - c. All of the affected control panels should be immediately corrected.
  - d. All of the affected consumers and businesses where these control panels are installed should be put on notice that immediate corrective action is required since the control panels are non-conforming equipment.
- 4) None of these control panels can be deemed to be reliable or safe.
- 5) Non-conforming equipment substantially increases the risks of property loss, serious personal injury and/or death to occupants within the premises during an intrusion, fire, smoke and carbon monoxide emergency event.
- 6) A comprehensive and corrective action plan needs to be instituted immediately.

The recipient of this report is hereby prohibited from utilizing it for any purpose other than what it was intended for.

Respectfully submitted,

Merton Bunker, PE