

## **Resolution No. 32**

### **COMMITTEE ASSIGNMENT: Occupational Health & Safety**

#### **Re: Update to 2008 Pro-Photoelectric Alarm Resolution**

1           WHEREAS, in 2008, the IAFF approved a  
2 resolution recommending the use of photoelectric  
3 technology, in part because the UL217 Standard  
4 (Underwriters Laboratories), which regulated smoke  
5 alarms, did not test for all critical factors; and

6           WHEREAS, there are still over 3,000 citizens  
7 who perish in structural fires across the United States  
8 and Canada every year; and

9           WHEREAS, the trend in total deaths and deaths  
10 per million population has been increasing over the  
11 last 10 years; and

12           WHEREAS, in at least 40% of these fires, it has  
13 been documented that the smoke alarms operated and  
14 in 17% of these fires, the smoke alarms were  
15 disabled; and

16           WHEREAS, currently, there are two principle  
17 types of smoke alarms that are intended to alert  
18 occupants of building fires: ionization and  
19 photoelectric smoke alarms; and

20           WHEREAS, ionization smoke alarms  
21 predominantly detect the presence of extremely small  
22 particles of smoke – often invisible – typical of  
23 flaming fires, while photoelectric smoke alarms  
24 predominantly detect larger smoke particles – always  
25 visible – typical conditions found at smoldering fires;  
26 and

27           WHEREAS, next year, as first recommended by

28 Chief Jay Fleming, member of Local 718, in 1997,  
29 Underwriters Laboratories will update UL217  
30 (Smoke Alarm Standard) to address the major  
31 concerns raised by the IAFF in the 2008 Resolution;  
32 and

33 WHEREAS, this new standard will only apply to  
34 newly manufactured smoke alarms and older smoke  
35 alarms may still be available to consumers for many  
36 years; and

37 WHEREAS, any alarm passing the new UL217  
38 8th Edition will be at least as effective at detecting  
39 fires as a photoelectric and at least as resistant to  
40 nuisance alarms as a photoelectric; and

41 WHEREAS, research indicates that all smoke  
42 alarms are intended to provide occupants time to  
43 escape; however, ionization smoke alarms may not  
44 operate in time to alert occupants early enough to  
45 escape from smoldering fires; and

46 WHEREAS, current research indicates that  
47 ionization smoke alarms detect flaming fires  
48 marginally earlier than photoelectric smoke;  
49 however, ionization smoke alarms are far more prone  
50 to nuisance alarms, increasing the probability that  
51 they will be disabled by building occupants; and

52 WHEREAS, photoelectric smoke alarms detect  
53 smoldering fires and fires starting in areas remote  
54 from smoke alarms significantly earlier than  
55 ionization smoke alarms; and

56 WHEREAS, dual alarms, also called combination  
57 alarms, that contain both technologies are available,  
58 but the benefit over photoelectric in the response to  
59 fires is marginal; and

60 WHEREAS, they are more costly and will

61 experience the same nuisance problem as ionization  
62 smoke alarms; and

63 WHEREAS, as many fires in residential  
64 occupancies begin as smoldering fires, particularly  
65 when occupants are sleeping, photoelectric smoke  
66 alarms provide more effective all-around detection  
67 and alarm than ionization alarms; and

68 WHEREAS, failure to detect a fire and provide an  
69 early alarm places building occupants at risk from an  
70 ever-escalating fire; and

71 WHEREAS, such escalating fires place the lives  
72 of firefighters responding to an increasing risk from  
73 such an escalating fire; and

74 WHEREAS, the increase in the use of  
75 photoelectric technology, or alarms that pass the new  
76 8th Edition UL217 Standard, have the potential to  
77 save hundreds of lives each year and should be  
78 promoted as the technology of choice by members of  
79 the IAFF in their homes; and

80 WHEREAS, IAFF members should advocate for  
81 their mandatory requirement for placement and use  
82 of photoelectric alarms, or alarms that pass the new  
83 8th Edition UL217 Standard, in fire and building  
84 codes; and

85 WHEREAS, IAFF members who currently have  
86 ionization smoke alarms should replace them as  
87 soon as possible with photoelectric or new 8th  
88 Edition UL 217 smoke alarms and, if IAFF members  
89 currently have photoelectric smoke alarms, they  
90 should replace them after 10 years with the new  
91 smoke alarms that have passed the UL217; therefore  
92 be it

93 RESOLVED, That the IAFF should petition for a

94 new Presidential Directive similar to Presidential  
95 Directive 5 (2003) that mandates this policy; and be  
96 it further

97 RESOLVED, That the IAFF should encourage all  
98 members who have ionization alarms to switch to  
99 photoelectric or the new 8th edition UL217 alarms  
100 and to encourage members to educate the public on  
101 the local level about this issue.

Submitted by: IAFF Local 718, Boston

Cost Estimate:

**COMMITTEE RECOMMENDATION:**

**CONVENTION ACTION:**