

How the “13 Situations that Shout ‘Watch Out’”
Became the “18 Watch Out Situations”

Jennifer A. Ziegler, Ph.D.

Department of Communication

Valparaiso University

Valparaiso, IN 46383

jennifer.ziegler@valpo.edu

219-464-5339

Author note. This analysis was compiled by examining articles and sidebars about the Watch Out Situations that appeared in *Fire Management Notes* according to the 2000 index (when it became *Fire Management Today*), along with other historic documents noted in the reference list. Please direct comments and suggestions to jennifer.ziegler@valpo.edu. Document last updated: August 4, 2008

Executive Summary

Although it is still a mystery about precisely when, where, or how the original 13 Situations that Shout ‘Watch Out’ were developed, there is good reason to believe that they originated in the late 1960s, and most likely after 1967. Officially, there were 13 “Situations that Shout ‘Watch Out’” in effect through the summer of 1987. Then, five items were added to the list when NWCG developed the “Standards for Survival” course later that year (1987). At that time, the name was also changed to 18 “Watch Out Situations,” and the sentence structure of each item was altered from the subjective “You are...” to a more objective description of each situation. 1987 was also the year the Fire Orders were reordered, and the Standards for Survival course and subsequent trend analyses of the Watch Out Situations emphasized how the two lists were supposed to work together. Although the Fire Orders were reordered in 2003, the list of Watch Out Situations has remained unchanged since 1987.

How the “13 Situations that Shout ‘Watch Out’” Became the 18 Watch Out Situations

According to Braun, Gage, Booth, & Rowe (2001), the “13 Situations that Shout ‘Watch Out’”(WOS) were originally created in the “mid to late 1960s” (p. 24); however, the actual list of WOS referenced in their article is dated “circa 1975” (p. 25) presumably because they were working from a document dated that year. According to a cumulative index created for *Fire Management Notes* (FMN) in 2000 (when the periodical changed to *Fire Management Today*), no articles or sidebars apparently mentioned the 13 Watch Out Situations during the 1960s and 1970s. However, in 1981 the Editor published “Thirteen Prescribed Fire Situations that Shout ‘Watch Out’” that were sent in by John Maupin from Prineville, Oregon, which suggests that the suppression-related list of WOS was well known enough by then to imitate. And, in a study of wildfire accidents completed in 1979, the NWCG proposed collapsing the 13 WOS and the Ten

Standard Fire Orders, into eight “Firefighting Commandments” that spelled the mnemonic “WATCH OUT” (NWCG, 1980, p. 3). (This proposal was apparently never approved.)

Thus, although the original 13 WOS did not appear in FMN until 1985 (Editor, 1985), the fire community was conversant with them as far back as 1975. Late in 1987, another sidebar appeared in FMN that listed “Thirteen Situations that Shout ‘Watch Out!’” (Editor, 1987), which indicates that 13 was probably the official number through the summer of 1987. (Indeed, a comment by Morse [1988] about 140 entrapments having occurred during the 1987 fire season provides support for this assertion.)

From 13 to 18

In late 1987, Morse and Monesmith (1987) published the article “Firefighter safety: A new national emphasis” in FMN, detailing a new “Standards for Survival” course and video that were being completed by “a small interagency working group” (p. 3) at the Boise Interagency Fire Center (now the National Interagency Fire Center). Quoting the Forest Service Director of Fire and Aviation at the time, the authors explained that the main purpose for the course was to teach “the proper recognition of the ‘Watch Out!’ situations followed by the initiation of the appropriate actions as defined in the Standard Fire Orders” (Morse & Monesmith, 1987, p. 3). The authors also explained that five items had been added to the list of WOS for the course “to reflect critical hazardous conditions that are not readily recognized” (p. 3). The list of WOS had also been rearranged, according to the authors, “in the sequence in which the hazardous situations are most likely to occur” (Morse & Monesmith, 1987, p. 3).

When the 1987 sidebar is compared with Morse & Monesmith’s (1987) description of the Standards course, it becomes apparent that a few other changes were made to the WOS in 1987 in the development of the Standards for Survival course. First, the title of the list was changed

from “Thirteen Situations that Shout ‘Watch Out’” to “Watch Out Situations” (Morse & Monesmith, 1987; cf. Editor, 1987). Second, each situation was reworded to reflect objective conditions rather than subjective ones. For example, “You feel like taking a little nap near the fire line” became “Taking a nap near the fireline” (Morse & Monesmith, 1987; cf. Editor, 1987). (Note that Morse and Monesmith’s 1987 article was also the same article that announced the rearrangement of the Ten Standard Fire Orders to spell FIRE ORDERS. The changes made to the WOS in the development of the Standards for Survival course makes it reasonable to assume that the 1987 revision to the Fire Orders also occurred in the development of the Standards for Survival course.)

The availability of the Standards for Survival training course (NWCG, 1987) was announced in FMN in 1988 (Monesmith, 1988). In announcing the course, Monesmith (1988) listed the five items that had brought the number of WOS up to 18: “Fire not scouted and sized up (1), Safety zones and escape routes not identified (3), Uninformed on strategy and tactics (5), Constructing lines without a safe anchor (8), Attempting a frontal assault on the fire (10)” (p. 30).

The 18 Watch Out Situations

By 1989, the “18” WOS were well established, according to a sidebar that appeared in FMN (Editor, 1989). The following year, in 1990, Morse published a summary of a report called “Trend analysis of fireline ‘Watch Out Situations’ in seven fire-suppression fatality accidents,” where he also referred to the 18 WOS as “the NWCG Survival Checklist” (Morse, 1990, p. 10). Consistent with the earlier rationale for the Standards for Survival course, Morse emphasized how the WOS were supposed to work along with the Fire Orders. He summarized the WOS that were most frequently overlooked on the seven incidents that were studied. He characterized these

as “blind spots” (he actually used the medical term *scotoma*) that were problematic because they prevented firefighters from taking the “dominant positive action,” – that is, obeying the relevant Fire Order – that could “counteract that negative situation” (p. 9). Based on the findings of the trend analysis, Morse concluded that “the relationship is clearly established between fireline fatalities and a lack of awareness or sensitivity to significant changes in fire behavior” (p. 11). His article concluded with recommendations for local and national training.

Through 2000 (the last year of the cumulative FMN index), the list of 18 WOS was repeated once again in a sidebar in 1992 (Editor, 1992). And, three other articles were published that referenced the WOS (e.g., Editor, 1995; Wilson, 1995; Valdez & Style, 1996). Although the Fire Orders were revised in 2003 (NWCG, 2003), the list of WOS has remained unchanged since 1987.

Limitations

It is important to note that this analysis only attempts to account for how the “18 Watch Out Situations” came about from the “13 Situations that Shout ‘Watch Out.’” As such, the analysis does not extend beyond 2000, having relied on the cumulative FMN index published that year. Furthermore, whereas Morse (1988) and Morse and Monesmith (1987) had emphasized the “integrated” use of the WOS with the Fire Orders, this may not necessarily reflect the *contemporary* rationale behind their promotion and use (cf. Ziegler, 2007).

Future Research

What remains to be learned is when, how, and why the *original* 13 WOS were developed. Unfortunately, no background was provided in the TriData study (TriData, 1998), which otherwise referenced the WOS extensively. Based on research on the history of the Fire Orders (Ziegler, 2007), it is most likely that the original 13 WOS were developed after 1967. This is

because there was no mention of the WOS in two key documents that grappled with a comprehensive approach to firefighter safety in the 1960s. First, a “Programmed Text” was developed by the Forest Service in 1965 as an instructional guide for firefighters to learn only the Fire Orders (Forest Service, 1965). Second, a 1967 Board of Review report for the 1966 Loop Fire investigation (Forest Service 1967), which simultaneously updated the original 1957 task force report that had led to the original development of the Fire Orders (USFS, 1957), focused only the Fire Orders. Like the Programmed Text, the Review Board report made no mention of any “Situations that Shout ‘Watch Out.’” For these reasons it seems reasonable to conclude that the WOS were developed after 1967, but before 1975 (Braun et al, 2001).

Based on a comment by Morse and Monesmith (1987), the original text of Carl Wilson’s study on “Some Common Denominators of Fire Behavior on Tragedy and Near-Miss Forest Fires” (e.g., Wilson, 1977) may hold some clues about the origin of the 13 WOS, particularly because that study covered the years 1926-1976. It is also possible that the original 13 WOS were developed informally and only integrated into policy after they were already in use, such as happened with LCES (Gleason, 1991; NWCG, 2006) and the Common Denominators of Fire Behavior on Tragedy Fires (NWCG, 2006; Wilson, 1977).

References

- Braun, C., Gage, J., Booth, C., & Rowe, A. L. (2001). Creating and evaluating alternatives to the 10 Standard Fire Orders and 18 Watch-Out Situations. *International Journal of Cognitive Ergonomics*, 5(1), 23-35.
- Editor. (1981). Thirteen prescribed fire situations that shout watch out! *Fire Management Notes*, 42(4): 10. (Contributed by John Maupin, Fire Staff Officer, Ochoco National Forest, Prineville, Oregon)
- Editor. (1985). Thirteen Situations That Shout, “Watch Out!” *Fire Management Notes*, 46(3): 19. (Note: issue 3 not available on line)
- Editor. (1987). Thirteen Situations that Shout “Watch Out!” *Fire Management Notes*, 48(3): 12.
- Editor. (1989). “Watch Out!” Situations. *Fire Management Notes*, 50(4): 29.
- Editor. (1992-1993). “Watch Out” Situations. *Fire Management Notes*, 53–54(1): 31.
- Editor. (1995). A checklist from an incident management team’s safety officer. *Fire Management Notes*, 55(4): 19. (Note: Contributed by Tony Dietz, then a member of a Great Basin interagency incident management team)
- Gleason, P. (1991). LCES—A Key to Safety in the Wildland Fire Environment. *Fire Management Notes*, 52(4), 9.
- Monesmith, J. (1988). Standards for survival. *Fire Management Notes*, 49(3): 30–31.
- Morse, G. A. (1990). A trend analysis of fireline “Watch Out” Situations in seven fire-suppression fatality accidents. *Fire Management Notes*, 51(2): 8-12.
- Morse, G. A., & Monesmith, J. R. (1987). Firefighter safety: A new national emphasis. *Fire Management Notes*, 48(4): 3–5.

National Wildfire Coordinating Group. (1980). *Preliminary report of task force on study of fatal /near-fatal wildland fire accidents*. Boise, ID: Author.

National Wildfire Coordinating Group. (1987). *Standards for Survival: Student workbook (PMS 416-2)*. Boise, ID: Author.

National Wildfire Coordinating Group. (2003, Feb 25). *Revision of the Ten Standard Firefighting Orders* (Transmittal Memo). Boise ID: National Interagency Fire Center.

National Wildfire Coordinating Group Incident Operations Standards Working Team. (2006, Jan). *Incident Response Pocket Guide (PMS #461/NFES #1077)*. Boise, ID: Author.

Tri-Data Corporation. (1998). *Wildland firefighter safety awareness study: Phase III—Key findings for changing the wildland firefighting culture*. Arlington, VA: Author.

United States Department of Agriculture Forest Service Division of Fire Control. (1957). *Report of task force to recommend action to reduce the chances of men being killed by burning while fight[ing] fire*. Washington DC: Author.

United States Department of Agriculture Forest Service Division of Fire Control. (1965). *10 Standard Fire Fighting Orders: A programmed text for training fire fighters to know and apply the Ten Standard Orders to fire situations (TT-8-5100)*. Washington, DC: Author.

United States Department of Agriculture Forest Service. (1967). *Report of the fire safety review team: A plan to further reduce the chances of men being burned while fighting fires*. Washington DC: United States Department of Agriculture Forest Service Division of Fire Control.

Valdez, M., & Style, J. R. (1996). Shout, “Watch out—Snag!” *Fire Management Notes*, 56(3): 26–27. (Note: entire volume unavailable online)

Wilson, C. C. (1977) Fatal and near-fatal forest fires: the common denominators. *The International Fire Chief* 43(9).

Wilson, N. L. (1995). Safety first: Brain vs. brawn. *Fire Management Notes*, 55(4): 31–32.

Ziegler, J. A. (2007). The story behind an organizational list: A genealogy of wildland firefighter's Ten Standard Firefighting Orders. *Communication Monographs*, 74(4), 415 - 442.