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uch has been written about the high-stress nature of aviation, but the role of family life largely has been left in the background. Yet, irregular duty periods and missing out on activities at home can spur a significant and detrimental cycle of stress.

In a study of the relationship between their domestic situations and their perceived effectiveness on duty, a group of U.S. Coast Guard helicopter pilots ranked six family-related factors highest among 53 potential sources of stress.¹ The factors included backlogs of tasks, arguments, lack of money, childrelated issues, use of time at home, and the overall degree to which home life matches expectations. Interestingly, only 14 of the 53 potential stressors involved family issues.

A similar survey of British commercial pilots found that work/family factors significantly influenced both job performance and the ability to cope with stress, and that the most important aid in coping with stress was stability in relationships and in home life.² The study noted that "the primary effect of home stress on work is in the mental or cognitive consequences: recurring thoughts during periods of low workload, decreased concentration and a tendency not to listen." In other words, demands at home can lead to preoccupied workers, a perilous condition in a safety-sensitive business.

The study of the Coast Guard pilots found that crewmembers perceive their

A stressful family life can affect performance in the cockpit.



flying performance as degraded during periods of high stress at home. When family problems carry over into the cockpit, they negatively affect several aspects of performance, including situational awareness, landing accuracy and smoothness, ability to divide attention, and the perceived degree of general airmanship.

Fatigue and mental preoccupation were found to be the most frequent manifestations of home-based stressors. Pilots reported feeling tired because of sleep disruption. Exhaustion is a common response to the stress of an argument or other especially tense event.

Social Isolation

Potential coping strategies, such as fostering stability at home, often are undermined by the nature of the profession. Stability is difficult to achieve when dealing with extended absences or irregular duty periods. Moreover, limiting relationships to workplace colleagues can lead to feelings of social isolation among the family.

Common in the aviation industry are around-the-clock jobs that must be staffed by licensed or otherwise specially trained individuals. Especially at smaller operations with limited staffing depth, this can lead to demanding schedules with very little flexibility — and social consequences that often are not appreciated by those who work 9-to-5.

Physiological and psychological effects of rotating shift work are fairly well known. It is common to end a duty cycle or shift period feeling too exhausted to participate in family functions.

Research psychologist and sleep specialist J. Lynn Caldwell said that this can cause spouses and children to feel neglected.³ "This is especially true when the duty period occurs between 1500 and 2300 — that is, while the family is home," she said. "Dinner time cannot be shared, for example, and other evening social activities are missed."

Reduced socialization is an insidious relationship hazard of the 24/7 work cycle. "Many people who work rotating shifts reduce their social activities because such schedules do not allow consistent involvement, which can lead to a feeling of social isolation," Caldwell said.

Sporting activities, family gatherings and recreational or religious activities usually occur in the evenings, on weekends or on holidays when a flight crewmember might be on duty. Friends or relatives with no exposure to the same lifestyle may not understand.

Difficult Readjustment

In addition to the known effects of irregular duty periods, the intense nature of many aviation jobs — the way they can consume attention while on duty and affect personalities while off duty — should not be underestimated.

Author Drew Whitelegg said that, because of the intense service aspect of their jobs, flight attendants often have difficulty readjusting to life back at home.⁴ Many flight attendants reported that, after days of being confined to a cabin with hundreds of needy passengers, they avoid a simple touch or are unable to hold a conversation with family members. "The image here is one of workers so agitated by the demands of the job that they cannot switch off: not exactly the hallmark of a group not taking work home with them," he said.

Whitelegg noted that the "intermittent husband syndrome" is an example of situations common to professions in which a spouse is regularly away from home for extended periods. The much-anticipated reunion can create as much stress as joy. "In situations where male pilots are away and their female partners are left at home, research suggests that families suffer from more stress-related illness and marital difficulties than those where husbands do not travel," he said. "Family routines become disrupted, with negative effects on wives and children."

Vicious Cycle

Another study found that "high job demands in the form of workloads and time pressures, coupled with lack of control, are likely to lead to mental strain and cardiovascular disease, particularly when social support is low."⁵

Irregular duty periods preventing pilots from participating in family activities can cause spouses and children to feel neglected.

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This stress is compounded by work environments with strong performance expectations, including peer pressure to excel. The inability to meet family obligations because of the time and energy required for work compounds the stress felt on the job. A vicious cycle can develop.

Aviation professionals often experience high job demands, inflexibility and time pressure. They live with strict deadlines, often balancing conflicting demands, and stress is the body's natural response. Stress, combined with the competitive "Type A personality" so common in the industry, can take a toll on physical or psychological health, or on satisfaction with the job or with a marriage.⁶

Of the 33 recommended coping strategies resulting from the study of the Coast Guard pilots, the two highest rated were "stability with a spouse" and a "smooth and stable home life." These were, in fact, cited by *all* of the pilots surveyed. Having a spouse with some knowledge of flying also was perceived as contributing to better flying performance. This would seem to support the strong "squadron family" culture so prevalent in military aviation.

The third most highly rated coping strategy was "talking to an understanding spouse or partner." This is further supported by a similar investigation of emergency medical personnel in Europe.⁷ The study suggested two fundamental strategies to manage workfamily stress: "psychological detachment" from the job while at home and "verbal expression of emotions." The study warned, however, that venting one's frustrations to an understanding listener can have the negative effects of causing the frustrations to linger and increasing the stress.

Psychological detachment — physical separation from the workplace and mental disengagement through activities that put one's focus on something else — can be very effective. It was more strongly correlated with overall "life satisfaction" than was relief of psychological strain.

The study noted that "when work interferes with family responsibilities, disconnecting from

job-related duties can be an important resource to diminish the effects of conflict on psychological strain." There is a limit, however; the study also noted that work intrusion on the family, leading to poor life satisfaction, and family intrusion on work, causing psychological strain, were factors that appeared less moderated by psychological detachment.

Familiar detachment strategies such as getting enough sleep, exercising and enjoying hobbies were cited by the Coast Guard study.

The nature of our industry makes some of the consequences on home life unavoidable, but the tools to manage them are generally well within our grasp and in an employer's interest to foster.

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