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Effects of Deployment on Homestation Job Stress and Burnout

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THESIS

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Abstract

The Global War on Terrorism has increased the demands placed on military members. The increased rate of deployments, coupled with the reduction in resources, has military leaders concerned that these changing demands will cause undue strain, adversely affecting the military member's quality of life. This research tests the effects of active duty military deployments on homestation job stressors and burnout. Pre- and post- deployment surveys were administered to test for any significant changes that resulted from a deployment. A group of non-deploying members was also measured during the same time frame to serve as the control group. Results showed that deployments resulted in increased levels of two facets of job satisfaction and decreased levels of role conflict, emotional exhaustion, and burnout. The only significant change noted by the control group was a decrease in the level of organizational commitment. Therefore, despite the fact that military deployments can be extremely stressful themselves, they do offer some beneficial effects to military members upon return to their homestation environment. On the other hand, those who do not get a "break" from the everyday work environment either stay the same or show less desirable levels of job stress and burnout.

To My Wife and Daughter

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I. Introduction

The decision to join the Armed Forces is much more than just an occupational choice (Alpass, Long, Chamberlain, & MacDonald, 1997). It is a lifestyle choice where the organization influences its member far beyond the boundaries of work (Alpass et al., 1997). This unique lifestyle has been characterized as one with rigid and unpredictable demands on the member's time as well as frequent reassignments and changes of residence. The military also sends its members to hostile locations for elongated periods of time. Because of this, the military has been referred to as a "greedy institution" that requires strong commitment and an elevated devotion to duty when compared to the vast majority of civilian organizations (Moskos & Wood, 1988).

The Global War on Terrorism, triggered by the terrorist attacks on the World Trade Centers, has increased the demands placed on these members' lifestyle where forces are being deployed worldwide more frequently despite the fact that the force has been downsized by approximately 35 percent since the end of the first Gulf War (Reed & Segal, 2000). For example, in 2003 when operations and personnel tempo were at all time highs for the Air Force, the Air Force had 18,000 fewer airmen than it did in 1997 (Jumper & Roche, 2003). Likewise, the Army has gone from 18 divisions in 1985 to only 10 divisions in 2003, while experiencing a 300 percent increase in the use of military force (Reed & Segal, 2000). Furthermore, additional reductions in military end strength are expected. Since the attack on the World Trade Centers in 2001, the Air Force, for example, has exceeded its congressionally-mandated end strength by over

16,000 airmen. Now that the height of Operation Iraqi Freedom is over, the Air Force, like the other services, is expected to reduce its personnel numbers back to the mandated levels (Jumper & Roche, 2003). The increased rate of deployments, coupled with the reduction in resources, has created an environment that forces military members to work longer and harder hours at both homestation and deployed locations (Reed & Segal, 2000). Military leaders are concerned that these changing demands will cause undue strain, adversely affecting the military member's quality of life. In fact, the Chief of Staff of the Air Force, General John Jumper, issued an Air Force-wide "Chief's Sight Picture" in October of 2004 emphasizing the problems stress is currently causing in the Air Force (Jumper, 2004). In his memorandum, General Jumper cited increased deployment tempo, increased work hours, inconsistent manning, and continuous workload as some of the major causes of stress for airmen. These current stressors are cited by the organization's leadership as contributors to the rise in suicides and accidental deaths (Jumper, 2004)

Astutely, the military has recognized the need to counteract these pressures in an effort to maintain its current level of domestic and international security. For example, the military conducts annual stress management training and has developed support programs such as the family support center. The Department of the Army has implemented a "stabilization policy" that limits the number of subsequent deployments for soldiers. This policy allows soldiers to re-acquaint themselves with their families, home station living, and the normal work environment (Reed & Segal, 2000). Within the Air Force, members are encouraged to take 14 consecutive days of vacation once per year (Secretary of the Air Force, 2004). This 14-day vacation is intended to give military members relief from everyday job stressors and burnout.

Some of the military's efforts to ameliorate the potentially adverse effects of working longer and harder hours have been focused on those members returning from deployments. Interestingly, the literature has varying opinions on the effects of deployments on military personnel. At least one study has shown that multiple military deployments within the Army increase the likelihood of turnover (Wong, Bliese, & Halverson, 1995). Conversely, two RAND Corporation studies showed that the effects of deployments across all services have positive results on enlisted reenlistment and officer retention (Fricker, 2002; Hosek & Totten, 2002). Additional studies have shown that soldiers who are suffering from stress are not blaming military-specific stressors such as deployments, frequent relocations, and non-voluntary assignments. Instead, soldiers suffering from stress are citing problems more common to the civilian world such as changes in work responsibility, increased work hours, and the type of work (Pflanz & Sonnek, 2002).

Interestingly, some research suggests that short military deployments (60-120 days) may serve as a relief from the constant demands and stressors of homestation jobs. In a recent study of active reserve service members, researchers found that annual reserve service can have respite effects equivalent to vacations (Etzion, Eden, & Lapidot, 1998). The reserve service members indicated that the annual activation period of two weeks or more provided a respite from their civilian jobs stressors, despite the high demands placed on them while on active duty.

Comparisons can be drawn between annual reserve service and active duty deployments. Both are demanding and provide a change in work environment. Bronson and Sthultz (2004) were some of the first to explore this idea, hypothesizing that if such

positive effects are possible with annual reserve service, then it is possible for the same effects to occur within active duty members as they deploy. Indeed, their results showed a slight decrease in burnout among post deployment individuals. However, methodological shortcomings limited the inferences that could be drawn from their results. Specifically, they compared two independent groups (i.e., a group before they deployed compared to a different group returning from a deployment) rather than studying the same group over time.

Accordingly, this study is designed to build on Bronson and Sthultz (2004) efforts. It evaluates pre- and post- deployment job perceptions of Air Force personnel to determine if active duty military deployments serve as a relief from home station job stressors and burnout. Specifically, the following research questions were examined:

1) Do the perceived levels of job stress and burnout decrease after returning from a deployment?

2) Do negative perceptions of role ambiguity and role conflict decrease after returning from the deployment?

3) Do deployments result in an increase in job satisfaction, organizational commitment, and self efficacy?

In order to answer these investigative questions, a sample of active duty personnel in the mission support career fields of civil engineering, contracting, finance, and services were queried before and after a deployment. Pre- and post-deployment job perception surveys were administered to both deployed personnel and a control group consisting of active duty counterparts of the deployed members who perform the same or similar home station duties as the deployed member. Several constructs were measured to include perceived job stressors, burnout, quality of deployment experience, detachment from

work, role conflict, role ambiguity, job satisfaction, turnover intentions, and organizational commitment.

The next chapter will discuss the literature on job stress and burnout, including recommendations for coping with burnout. In addition, the literature covering the effects of military deployments on military personnel will be discussed. Based on the literature, a series of hypotheses will be developed. Specifically, these hypotheses will address how and why active duty military deployments can potentially serve as effective respites from home station job stressors and burnout.

II. Literature Review

This study explores the idea that active duty military deployments can serve as a respite from home station job stressors and burnout. Though the research in this area is relatively new and limited (e.g., Bronson & Sthultz, 2004), several empirical studies have shown that time away from the job, even if it includes performing work, can have a positive effect in reducing job stress and burnout (Lounsbury & Hoopes, 1986; Eden, 1990; Westman & Eden, 1997; Etzion, Eden & Lapidot, 1998; Westman, Etzion & Danon, 2001). The discussion first does a cursory review of the relevant literature on job stress, strain, and burnout. Next, a series of hypotheses is developed. In particular, the hypotheses address how deployments for active duty military members may create a respite from home station job stressors and burnout.

Job Stress, Strain, and Burnout

Savery, and Luks (2001) define stress as a "mental and physical condition which affects an individual's productivity, effectiveness, personal health, and quality of work." This definition of stress, in its simplest form, suggests that the effects of stress can be either positive or negative. However, much of the literature indicates that stress has a negative connotation. Westman and Eden (1997) said that stress occurs when one perceives the environmental demands to exceed one's ability to cope with the demands. Job stress, therefore, is the perception that the demands originating in the work environment could overwhelm an individual's coping abilities. Job stress can be brought on by three broad categories of antecedents that are related to the characteristics inherent in an individual, their job, and their organization (Cordes & Dougherty, 1993). Some of

the most common sources of job stress cited in the literature include role conflict, role ambiguity, and role overload (Cordes & Dougherty, 1993; Lait & Wallace, 2002) which will be addressed later in this chapter. Individuals who are forced to cope with job stressors may respond with varying degrees of strain. Strain is defined as the reaction to or outcome from a result of being exposed to stressors (Jex & Beehr, 1991). Worry, anxiety, depression, increased heart rate and feeling tired are a few forms of strains that can be caused by stressors. When stress occurs daily (also known as chronic stress), it can lead to the phenomenon known as burnout, where individuals experience physical, emotional, and mental exhaustion (Maslach, 1982; Pines & Aronson, 1988; Eden, 1990). Burnout is considered the most extreme form of strain produced by job stressors (Westman & Eden, 1997). The next sections further explain the concepts of stress, strain, and burnout.

Job Stress

There are two distinct categories of job stress: chronic job stress and acute job stress. Chronic and acute stress have been shown to differ in their effects (Eden, 1990). Chronic job stress is the persistent exposure to stressors on a day to day basis (Westman & Eden, 1997). The persistent and inescapable nature of chronic job stress has been shown to cause burnout (Westman & Eden, 1997). Acute job stress, on the other hand, is characterized by stressors caused by critical job events that place excessive demands on individuals for a discrete period of time (Eden, 1990). Acute stressors are short-lived, and have not been shown to cause burnout (Eden, 1990). Military deployments, due to

their short duration (90-120 days), are considered to be an example of an acute stressor. The present study focused on the ability of deployments to decrease the negative perceptions of chronic job stressors associated with homestation jobs in active duty military personnel.

When the perceptions of job stress exceed the individual's ability to cope, the effects can have many negative effects for both the individual and the organization (Cordes & Dougherty, 1993). Due to the potential negative effects on productivity, effectiveness, personal health, and quality of work associated with exposure to stress, much research has been directed towards discovering the contributing factors of job stress. Etzion et al. (1998) showed that job stress was a result of the absence of positive job characteristics (e.g., variety, autonomy, and challenge) as well as the presence of negative job characteristics (e.g., overload, red tape, role conflict and ambiguity). Cordes and Dougherty (1993), in their summary of the stress literature, showed that stress is influenced by a mixture of personal characteristics (e.g., individual's capacity to cope), job characteristics and role characteristics (e.g., role conflict, ambiguity, and overload), and organizational characteristics (e.g., reward systems). The following summary is by no means a comprehensive review of the stress and burnout literature, but rather a brief overview of the key points that apply to this study (For comprehensive reviews see Cordes & Dougherty, 1993 and Halbesleben & Buckley, 2004).

Personal characteristics. Specific personal characteristics have been shown to explain why stress can be so damaging for some and why others are virtually unaffected.

Personal characteristics are comprised of demographic variables, social support systems, and personal traits (Cordes & Dougherty, 1993).

Certain demographic groups appear to be more susceptible to stress than others. For example, research has shown that men and women differ in their interpretation of work experiences. These studies found that women are predisposed to experience stress (Greenglass, 1982; Etzion & Pines, 1986; LaCroix & Haynes, 1987), and emotional exhaustion (an outcome of stress) more frequently than their male counterparts (Gaines & Jermier, 1983). In addition to gender, the age of workers has been shown to be a reliable predictor of the likelihood of burnout. Younger employees consistently reported higher levels of burnout compared to their older counterparts in study of classroom teachers (Russel et al., 1987). Certain personality traits are also more prone to stress. Several studies have shown that individuals with low self-efficacy beliefs are more sensitive to work stressors than those with strong self-efficacy beliefs (VanYperen, 1998; Jex & Bliese, 1999; Greenglass & Burke, 2002). Other personality variables like negative affectivity and locus of control have also been shown to be significant predictors of job stress and strain (Spector & O'Connell, 1994). Off-the-job challenges such as exposure to work-family conflict (Frankenhaeuser et al., 1989) and marital dissatisfaction (Wolpin et al., 1991) have also shown to result in higher levels of work stress. Certainly, the literature supports the argument that the personal characteristics individuals bring to the workplace can influence their perception of job stress. This study will measure the changes in the personal characteristic of self efficacy, and will test all constructs for any significant differences between gender that result from a deployment.

Job characteristics. Job characteristics refer to the specific features of a job that distinguish it from other jobs. As explained by Etzion et al. (1998), the absence of positive job characteristics and the presence of negative job characteristics result in high stress for individuals in these jobs. For example, jobs with bureaucratic features such as formalization (degree to which organization norms are explicitly formulated) and routinization (degree to which a job is repetitive) are likely to cause higher levels of job stress (Lait & Wallace, 2002). Similarly, stress has been shown to be significantly higher in jobs that combine high demands with low job control (Rijk, LeBlanc, & Schaufel, 1998). Hobfell's (1989) Conservation of Resource Theory of stress states that stress occurs when the "resources" or positive job characteristics (e.g., significance, job enhancement opportunities, participation in decision making, and autonomy) are insufficient to overcome the "demands" of the job. On the other hand, jobs in which employees are empowered and have more control over how they accomplish their work significantly reduce the risk of stress (Frioland, 1993). Furthermore, jobs that offer collegiality (teamwork and support among professional colleagues) have also shown to reduce feelings of job stress (Lait & Wallace, 2002). Indeed, the literature suggests the particular characteristics of a job are a potential source of work stressors. The level of satisfaction with rules and procedures (operating conditions), satisfaction with co-workers, and overall job satisfaction will be measured in this study to evaluate any changes in job perceptions that result from a deployment.

Role characteristics. Role characteristics refer to the stressors of role conflict, role ambiguity, and role overload within the work environment. Role conflict is defined as

the difference, as perceived by the employee, between the job expectations conveyed by multiple sources (Rizzo et al., 1970). For example, role conflict exists when an employee detects discrepancies between his or her job description and the demands of a supervisor. Jackson and colleagues (1986) found that emotional exhaustion (the key component of burnout) is strongly associated with role conflict. Role ambiguity is centered on an employee's need for certainty and predictability and is caused by an employee's confusion concerning expectations of what his or her job responsibilities are (Rizzo et al., 1970). Role ambiguity has also been found to be a significant predictor of two components of burnout: diminished personal accomplishment (Jackson et al., 1986) and emotional exhaustion (Leiter & Maslach, 1988). The last role stressor, role overload, is typically broken down into two subcategories: quantitative and qualitative overload. Quantitative overload occurs when an employee has more work than is possible to accomplish in a given period of time. Quantitative overload in today's environment has been linked to continual cutbacks and downsizing of organizations, ultimately resulting in more work per employee. Qualitative overload, on the other hand, occurs when an employee's job requires skills and knowledge the employee simply doesn't have (French & Caplan, 1973). Both quantitative and qualitative overload have been found to be primary causes of stress and burnout in work environments (Kahn, 1978; Pines & Aronson, 1988). Clearly the research in this area has shown individuals that report higher levels of these role stressors also report higher levels of job stress and burnout. The effects of deployments on role conflict and role ambiguity will be assessed in this study.

Organizational characteristics. Organizational characteristics determine how variables associated with the organization itself and its policies may cause stress. Variables such as job context, rewards, and punishments are used to determine whether an organization induces stress (Cordes & Dougherty, 1993). Poon's (2003) study of Malaysian employees showed that those who perceived a high level of politics in their workplace reported higher levels of stress, lower levels of job satisfaction, and higher levels of intention to quit. Mikkelsen, Ogaard, & Lovrich (2000) observed that an organization characterized by a positive learning climate reduces job stress and also has a direct and positive impact on job satisfaction and commitment. Furthermore, an examination of school-based educators showed that negative organizational characteristics such as unclear goals and poor supervision produced higher levels of work stress (Wolpin, Burke, & Greenglass, 1991). Lastly, Lait and Wallace (2002) found that employees reported higher levels of stress when their organization did not meet the personal expectations of the employee. Organizational commitment and satisfaction with rewards are the organizational characteristics measured in this study.

The literature clearly suggests that under certain circumstances personal characteristics, job and role characteristics, and organizational characteristics can influence job stress. These antecedents of stress, either independently or combined, can create a stressful work environment for individuals. Now that the antecedents of job stress have been identified, the next section will address the potential consequences of chronic job stress.

Consequences of job stress. The outcomes of stress have both positive and negative consequences for individuals and organizations. The positive results of stress are rooted in the idea that stress in the work environment challenges individuals to perform at higher levels and prevents complacency. This goes back to the most general definition of stress which says that stress influences productivity (i.e., productivity can go up when under stress). Therefore, stress by itself does not cause burnout. This is consistent with Hobfell's (1989) Conservation of Resources Theory. The positive outcomes of stress are possible because the employees "resources" are, or become, sufficient to meet the "demands" of the job. In fact, Cavanaugh et al. (2000) found that challenge-related stress is negatively related to job search. In addition, Jones and Fletcher (1993) found that when employees experienced role conflict it required them to be more flexible and to expand their sources of information. Pines and Aronson (1988) suggests that the positive outcomes of stress are a result of a supportive environment, where the employees feel valuable and appreciated and believe that their work has significance. When workers are challenged appropriately in a supportive environment, the outcomes of stress can be beneficial to the individual and the organization.

Despite evidence that suggests stress offers some benefits, the majority of the literature focuses on the negative consequences of job stress. The most commonly studied reaction to job stress in the literature is burnout. Burnout is considered by most as the most extreme form of strain the results from chronic stress (Lee and Ashworth, 1993).

Burnout

Burnout is defined as a strain caused by chronic stressors (Etzion et al, 1998). Freudenberger (1974) coined the term when explaining the gradual loss of motivation in volunteer work over time. Maslach (1976) further defined burnout operationally in three dimensions: emotional exhaustion, depersonalization, and personal accomplishment. The emotional exhaustion component of burnout, or the strain linked to tension, anxiety, physical fatigue, and insomnia (Lee & Ashforth, 1990), is considered the essence of burnout (Koeske & Koeske, 1989). Depersonalization refers to the coping mechanism by which an individual attempts to stop the depletion of emotional energy by treating others as objects rather than people (Lee & Ashworth, 1990). The last dimension of burnout, personal accomplishment, refers to a form of self-evaluation. It represents an aspect of self-efficacy reflecting one's perception of control and one's desire to be in control (Lee & Ashworth, 1990, 1996). Pines and Aronson (1988) found that burnout occurs when employees are exposed to work stressors in a stressful rather than supportive environment. Stressful environments are characterized by the presence of negative job features (e.g., meaningless paper work and senseless rules) and the lack of positive job features (e.g., empowerment, opportunities for growth, and significance). To evaluate burnout in this study, both emotional exhaustion and burnout were examined.

Burnout results in several negative consequences for individuals and the organization. For individuals, burnout can result in psychological and physiological strain and physical exhaustion (Lee & Ashforth, 1990). In organizations, burnout has been shown to result in increased turnover intentions, decreased job satisfaction, increased absenteeism, erosion of organizational commitment and poor job performance

(Cordes & Dougherty, 1993; Lee & Ashworth, 1996). These studies show the measurable and negative affects of burnout on individuals and organizations.

Moderating effects on job stressors and burnout. The literature has identified several constructs that have shown to act as moderators or buffers against job stress and burnout. As a caveat, only the moderators of particular interest to this study are discussed: self efficacy, organizational commitment, and job satisfaction.

Self-efficacy is defined as one's beliefs in their own capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet the demands of a given situation (Wood & Bandura, 1989). Numerous studies have been dedicated to testing the effects of differing levels of self-efficacy on work related stressors. For example, those with strong self-efficacy have been shown to react less negatively to long work hours and work overload (Jex & Bliese, 1999), report lower levels of role conflict (Witt, 1991), and are less likely to burnout (Greenglass & Burke, 2002) when compared to those with low self-efficacy. This research shows that an individual's level of self-efficacy is likely to impact their perceptions of work-related stressors.

Steers and Porter (1983) defined organizational commitment both behaviorally and attitudinally. Behaviorally, organizational commitment refers to the commitment caused by the perceived costs associated with leaving the organization. For example, military members late in their careers may feel a strong incentive to complete 20-years of service in order to receive military retirement benefits, even though their personal desire to stay in the military has declined (Jans, 1988). Attitudinally, organizational commitment refers to the strength of individual's identification with and involvement in a

particular organization (Porter, Steers, Mowday, & Boulian, 1974). Here the individual has a strong belief in the organization's values and goals, is willing to exert considerable effort on behalf of the organization, and has a definite desire to maintain membership in the organization. Allen and Meyer (1990) further defined organizational commitment into three levels: affective commitment (emotional attachment), continuance commitment (perceived costs associated with leaving), and normative commitment (feelings of obligation). Despite the distinction, there is agreement on the moderating effects organizational commitment has on work-related stressors. Research has shown that attitudinal or affective commitment moderated the effects of role stressors on burnout (King & Sethi, 1997) and the effects of emotional exhaustion on effective work behaviors (Cropazono, Rupp & Byrne, 2003). These studies show the buffering capability of organizational commitment on job-related stressors.

Job satisfaction is defined by Spector (1997) as the degree to which people like their jobs. Similarly to self-efficacy and organizational commitment, higher levels of job satisfaction have also been shown to mediate work-related stressors and burnout. Bacharach and colleagues (1991) and Shirom (1989) found that individuals with low levels of job satisfaction were likely to report high levels of burnout. Other research has shown that job satisfaction mediates the influences of role conflict and role ambiguity (Yousef, 2002). Singh and colleagues (1994) also found evidence of a significant negative relationship between job satisfaction and the depersonalization dimension of burnout. This research validates job satisfaction's role as a mediator of work-related stressors and burnout.

Clearly, individuals who posses higher levels of these moderators, either independently or combined, will be more resistant to the negative effects of job stress and burnout. On the other hand, individuals who do not posses these moderators are more prone to the strains that result from exposure to work related stressors.

Coping with burnout. The literature is filled with techniques that have shown to reduce burnout. Suggestions include learning to relax (Evans, 1992), limiting work hours (Alessandra, 1993), setting realistic job goals (Anonymous, 1999), taking control with time management (Alexander, 2000), and eating well and exercising (Clarke, 2003). However, the most common and widely accepted method of coping with burnout is a respite or break from work.

The most common respites described in the literature include short breaks while at work (coffee breaks or socializing with coworkers), day-off and weekend respites, and the annual vacation. Short breaks, while shown to be beneficial (Westman & Eden, 1997), are by definition short and do not remove the individual from the workplace. Due to these shortcomings, Westman and Eden (1997) conclude that it is unlikely that breaks of such a short period would suffice to relieve burnout. Research has shown that even a day or two off does have healthful effects; however, similar to other short respites, one or two days off is unlikely to significantly reduce burnout from chronic job stressors (Westman & Eden, 1997). Accordingly, in terms of taking breaks from work, vacations are typically viewed as the traditional source of relief from job stressors and burnout (Etzion et al., 1998). The most popular motive for vacation is relaxation (Rubenstein, 1980). Vacations, in their purest sense, offer a complete break from work, where the

individual is free to pursue personal interest away from the office environment. Vacations have been shown to relieve both chronic and acute job stress (Eden, 1990). In addition to relieving job stress, vacations have also been shown to reduce burnout (Westman & Eden, 1997). The reduction in burnout as a result of a vacation tended to last for a period of up to three weeks (Westman & Eden, 1997).

Relieving job stress and burnout can also be accomplished while performing work. A large percentage of the workforce today is required to accomplish work in settings other than the everyday office. In fact, business travel has received some attention in the stress literature. Research has shown nine out of ten business travelers enjoy the travel because the trips provide a needed break from home and the office routine, it makes them feel important, and gives them a chance to see new places (Fisher, 1998).

Exploring the idea of longer breaks from the normal workplace as a source of burnout reduction, Etzion et al. (1998) investigated active reserve military service in the Israeli Defense Forces as a respite from civilian job stress. Despite the high demands of reserve service, the study showed that men who did at least two weeks of reserve service experienced a decline in job stress and burnout in their civilian jobs compared to those who did not serve. The study showed that there were two overarching moderating effects of the quality of the respite. The first effect was the quality of the reserve service experience. Those who had a good experience showed lower levels of job stress and burnout than those who rated the experience as negative. The second moderating effect was level of detachment from family and job experienced by the member. The more

detached the individual was from their civilian jobs and family, the greater the relief from job stressors and burnout.

Bronson and Sthultz (2004) took the idea of military service as a respite one step further. They hypothesized that like reserve service, active duty military deployments (defined as 90-120 days away from home station job and family) could also serve as a respite from home station job stressors and burnout. Their study showed a slight non-significant decrease in burnout among the post-deployment responses compared to the pre-deployment responses. Their research results, however, were limited since they were unable to capture pre- and post-deployment measures of job stress and burnout from the same group; their conclusions were drawn by comparing two independent groups. In addition, unlike the Etzion et al. study, Bronson and Sthultz did not measure job stress and burnout of a comparison group that did not deploy.

This research builds on the Bronson and Sthultz study to determine if active duty military deployments serve as a source of respite from home station job stressors and burnout. It is hypothesized that active duty military deployments can have similar respite effects to vacations and reserve service. The specific predictions to the research questions are as follows:

1) Do the perceived levels of emotional exhaustion and burnout decrease after returning from a deployment?

Studies have shown that stress in the military is caused by a myriad of problems common to the civilian sector rather than military-specific stressors such as deployments (Rogers, Li, & Shani, 1987; Pflanz & Sonnek, 2002). In addition research conducted by Etzion

and colleagues (1998) showed that reserve service, which has many similarities to active duty deployments, resulted in a decrease in job stress and burnout when the reservists returned to their civilian jobs. It is therefore anticipated that the levels of homestation job stress and burnout will decrease when service members return from a deployment. Although a 90-120 deployment can be extremely stressful in itself (an acute stressor), a break from the normal homestation work setting should provide a respite from the homestation job stressors and burnout.

2) Do perceived levels of role ambiguity and role conflict decrease after returning from the deployment?

Role ambiguity and role conflict will be measured to determine the levels of job stress and burnout. The literature clearly shows that when the perceived levels of role ambiguity and/or role conflict are high, the level of stress is high (Jackson et al., 1986; Leiter & Maslach, 1988). In addition, these role stressors are among the most frequently cited to cause burnout (Lee & Ashworth, 1989) As a result of being away from the role stressors of the homestation environment for a period of 90-120 days, it is anticipated that the perceived levels of role ambiguity and role conflict will decrease upon the deployees' return to their homestation environment.

3) Do deployments result in an increase in job satisfaction, organizational commitment, and self efficacy?

Higher levels of job satisfaction (Spector, 1997; Yousef, 2002), organizational commitment (Porter, Steers, Mowday, & Boulian, 1974; Allen & Meyer, 1996; King & Sethi, 1997; Cropanzano, Rupp & Byrne, 2003), and self efficacy (VanYperen, 1998; Jex & Bliese, 1999, Greenglass & Burke, 2002) have been shown to moderate the effects and

consequences of job stress and burnout. If the deployment experience does serve as a respite from job stress and burnout at the homestation environment, it is predicted that it will also result in increased perceptions of these moderators.

III. Method

To accomplish this study, a questionnaire based on the work by Bronson and Sthultz (2004) was administered to a sample of active duty Air Force members, representing the occupations of engineering, services (responsible for managing and operating food facilities; transient and temporary lodging facilities; fitness and recreation programs and facilities; and mortuary affairs administration), contracting (procurement), and finance (receiving, dispersing, and accounting for funds). The questionnaire measured burnout, emotional exhaustion, role conflict, role ambiguity, self-efficacy, organizational commitment, and four facets of job satisfaction. This chapter discusses the details of the sample, procedure, measures, and analysis used to conduct this study.

Sample

This study examined a subset of mission support personnel that deployed and returned from a deployment within the timeframe of the study. Mission support personnel are responsible for the sustainment of homestation and deployed locations and include the career fields of logistics readiness (managing, administrating, and operating logistic plans, transportation, vehicle maintenance, fuel, and supply systems), contracting, communications, civil engineers, services, security forces and personnel. The four career fields captured under this study were civil engineering, contracting, finance, and services. These disciplines were chosen as a convenience sample since the researcher had contacts and access to individuals in these career fields. In addition, the selected career fields tend to frequently deploy and play an important role in deployment operations. The military rank of the sample ranged from Lieutenant Colonel (equivalent to upper level manager)

to Airman First Class (equivalent to the hands-on worker). In order to derive a comparable group of active duty personnel who were not deploying, the method recommended by Etzion (1988) was used where those leaving were asked to identify a coworker from their home station to complete the questionnaire. Participants were asked to recommend an individual that (a) performed the same day-to-day duties and (b) was not deploying.

In this study, a list of personnel scheduled to deploy was provided by a group of key informants. Other names were provided by various Air Force administrative agencies and their respective human resource managers. In all, 885 future deployees were identified. Of these 885, 351 (39.6%) completed the pre-deployment survey. Of the 351 that completed the pre-deployment survey, 185 (53%) completed the post deployment survey upon their return from the deployment. In addition, 198 of the 351 pre-deployment surveys identified the names of non-deploying co-workers that would serve as the control group. Of the 198 non-deployees identified, 97 (49%) completed the pre-deployment survey. Of these 97 that completed the pre-deployment survey, 32 (33%) completed the post-deployment survey. The smaller sample size for those not deploying was a result of the fact that some deploying members did not provide the name of non-deploying counter-part, a lot of the same counter-parts were identified for more than one deploying individual, and that some identified counter-parts did not participate in the study.

Demographic information was collected on all participants. The mean age for the deployed individuals was 32.1 years. The sample consisted of 144 males (78%) and 41 females (22%). The mean age for the non-deploying control group was 32.4 years. The

control group sample consisted of 24 males (73%) and 9 females (27%). In addition, participants reported their career field and their experience in that career field. For the 90-person civil engineer pre-deployment sample, the reported average number of years of experience in civil engineering was 11.85 years. Those working in the food, lodging, and recreational services (n=53) reported average number of 9.66 years experience. For the 26-person contracting pre-deployment sample, the reported average number of years of experience in contracting was 7.06 years. For the 16-person finance pre-deployment sample, the reported average number of years in finance was 10.75 years. In regards to the control group, the 15-person civil engineering control group sample yielded 12.48 years of experience. The five-person services control group sample had a reported average of 4.37 years of experience. The six-person contracting control group sample yielded 3.22 years of experience and the seven-person finance control group sample had a reported average of 10.55 years in finance.

Participants reported their educational background by reporting their highest level of education completed. The education levels of the 185 pre-deployment participants were: two had some high school education, 75 completed high school, ten completed high school with some college education, 44 have their associates degree, 35 completed their bachelor degree, and 19 have their masters degree. The education levels of the 32 non-deployed, control participants are: eight completed high school, three completed high school with some college education, nine have their associates degree, eight completed their bachelor degree, and four have their masters degree.

Procedure

The data were collected at two times, before the participants deployed and after the participants returned. The pre-deployment survey was conducted anywhere from one-month to one-week prior to the member leaving. The post-deployment survey was sent via email and arrived no later than two-weeks after the member returned to their home station job. The control group (non-deploying group) was administered the same pre-deployment and post-deployment questionnaires at roughly the same 90-120 day interval as their deployed counterparts. The pre- and post- deployment questionnaires were identical (with the exception of the demographic data which was only collected on the pre-deployment survey and the deployment information which was only collected on the post-deployment survey). Once the pre-deployment and post-deployment match was made, the names were removed. All data that were collected were kept confidential and were viewed only by the researchers.

Pre-deployment data were collected using both paper-and-pencil and web-based questionnaires (see Appendix A for pre-deployment questionnaire). Research shows that the quality of the data collected is not compromised when using both paper-and-pencil and web-based surveys (Griffis, Goldsby, Cooper, 2003 & Coderre, Mathieu, St-Laurent, 2004). A pre-deployment paper-and-pencil questionnaire was administered to a group of procurement and finance personnel during an orientation session that was held prior to the members' departure on an extended deployment. Thirty-one finance and 19 contracting personnel filled out the paper-and-pencil pre-deployment survey at this session. The remainder of the pre-deployment data was collected via a web-based version of the same questionnaire that was sent via email to the list of future deployees as

identified by key informants. Web-based data collection methods have been shown to achieve quicker response as well as higher response rates (Griffis et al., 2003). In addition to answering the questions on the pre-deployment survey, members were asked to provide their name and the name and email address of a co-worker at their homestation that was (a) not deploying, and (b) who performed the same of similar duties as they did on a day-to-day basis. The names of participants were collected in order to match their pre-deployment survey responses with their post-deployment survey responses. The non-deploying co-workers were contacted via electronic mail and asked to complete a web-based version of the same pre-deployment questionnaire.

All post-deployment responses were obtained via the web-based survey (See Appendix B for post-deployment questionnaire). The web-based post-deployment survey was sent via electronic mail to all the members who participated in the pre-deployment survey approximately 90 days after the completion of their pre-deployment survey.

Multiple contact methods suggested by Dillman (2000) to boost response rates were used with the web-based questionnaire. First, participants were sent an email message forewarning them of the questionnaire and the purpose of the study. The message explained the study's purpose, the confidential nature of the data, and notified them that a questionnaire will follow. The second e-mail, sent one-week later, once again explained the purpose of the study and provided a hyperlink to the web-based survey. A third e-mail, sent two-weeks after the second email, urged those who had not yet completed the survey to do so. Lastly, two-weeks after the third email, a final reminder was sent to all participants who had not yet completed the survey informing them that they had one more week to do so. (See Appendix C for all letters sent to participants).

Response rates have been shown to be significantly higher when utilizing this procedure (Dillman, 2000). For example, two separate studies employing this method achieved response rates of 58% (Dillman, 2000).

Measures

The questionnaire measured burnout, emotional exhaustion, role ambiguity, role conflict, self-efficacy, organizational commitment, and job satisfaction. In addition to measuring overall job satisfaction, the questionnaire included measures of four facets of job satisfaction, namely, satisfaction with the nature of work, co-workers, operating conditions, and contingent rewards. Each variable, with the exception of Burnout, was measured using a 7-point Likert-type scale ranging from 1 = *Strongly Disagree* to 7 = *Strongly Agree*. Burnout was measured using Pines and Aronson's 7-point frequency scale ranging from *1= Never* to *7 = Always*.

Burnout. Burnout was measured using Pines and Aronson's (1988) 21-item Burnout Measure. The Burnout Measure collectively assesses physical, emotional, and mental exhaustion and is considered to be second most widely used burnout measure (Scaufeli, Enzmann, and Girault. 1993). The Maslach Burnout Inventory is more commonly accepted, however, the Burnout Measure was used in an effort to mirror the Etzion et al. (1998) study. Sample items include, "How often do you feel run-down?" and "How often do you feel weak and susceptible to illness?". As the alpha coefficients were tested in this sample, an alpha of .79 was observed for the pre-deployment sample and an alpha of .87 was observed for the post-deployment sample. .

Emotional Exhaustion. In order to verify the findings of the Pines and Aronson Burnout Measure, emotional exhaustion, a subcomponent of burnout, was measured using seven items from the Emotional Exhaustion (EE) scale in the Maslach-Burnout Inventory (Maslach & Jackson, 1986). The Emotional Exhaustion scale measures an individual's feeling of being depleted of energy and an overall drained sensation resulting from excessive psychological and emotional demands (Maslach & Jackson, 1986). Sample items include "I feel frustrated by my job." and "I feel like I am working too hard on my job." The Emotional Exhaustion measure of the Maslach-Burnout Inventory, has been shown to be the most reliable subscale (with a coefficient alpha of .88) when compared to the other subscales of Personal Accomplishment and Depersonalization (Drake & Yadama, 1995). In this sample, the coefficient alpha was .76 for the pre-deployment sample and .86 for the post-deployment sample.

Role conflict. Four items developed by Rizzo et al. (1970) were used to tap role conflict. Sample items are "I work under incompatible policies and guidelines" and "I have to do things that should be done differently." Jackson and Schuler (1985) showed the reliability of Rizzo et al.'s construct to have a coefficient alpha of .79. Likewise, a comparison of 13 studies showed that the role conflict scale developed by Rizzo et al. tended to be internally consistent with alpha coefficients ranging from .74 to .90 with a median of .82 (Shepherd & Fine, 1994). In this sample, α was .77 for the pre-deployment sample and .87 for the post-deployment sample.

Role ambiguity. Role ambiguity was also measured by four items taken from Rizzo et al.'s (1970) role conflict and role ambiguity scale. Sample items measuring role ambiguity are "I know exactly what is expected of me" and "I know what my

responsibilities are." Jackson and Schuler (1985) showed the reliability of the role ambiguity construct to have a coefficient alpha of.79. Similar to the role conflict construct, Shepherd & Fine (2001) found that role ambiguity items taken from Rizzo et al.'s scale resulted in alpha coefficients that ranged from .74 to .90 in a comparison of 18 studies. In this sample, α was .77 for the pre-deployment sample and .87 for the post-deployment sample.

Self-efficacy. An 8-item generalized self-efficacy scale developed by Judge, Locke, Durham, and Kluger (1998) was used in this study. By using a generalized self-efficacy scale we were able to measure one's self-actualized capability to handle perceived stressful situations. Sample items include "I usually feel I can handle the typical problems that come up in life" and "I often feel there is nothing I can do well." Judge et al. measured generalized self-efficacy and found that the internal consistency of the scale resulted in alpha coefficients ranging from .80 to .89 in a comparison of four samples (Judge, Erez, & Thoreson 2003). In this sample, α was .81 for the pre-deployment sample and .90 for the post-deployment sample.

Organizational commitment. Organizational commitment is defined as the overall strength of an individual's identification with and involvement in an organization (Porter, Steers, Mowday, & Boulain, 1974). The nine-item Porter et al. Organizational Commitment Questionnaire (OCQ) was used to measure organizational commitment (Porter et al., 1974). Sample items include "I really care about the fate of this organization" and "I am proud to tell others that I am a part of this organization." In a study by Bline, Duchon, and Meixner (1991) the 9-item Porter OCQ was shown to have a

coefficient alpha of .92. In this sample, α was .80 for the pre-deployment sample and .89 for the post-deployment sample.

Overall job satisfaction. Job satisfaction refers to the degree in which people like their jobs (Spector, 1997). To measure overall job satisfaction, six items adapted from the Brayfield-Rothe Index of Job Satisfaction were used (Brayfield & Rothe, 1951). In a study conducted by Curry, Wakefield, Price, and Meuller (1986), the six items used were found to have a coefficient alpha of .86. Sample items include "I like my job better than the average worker does" and "Most days I am enthusiastic about my job." In this sample, α was .77 for the pre-deployment sample and .87 for the post-deployment sample. In addition to overall job satisfaction, measures of four facets of job satisfaction (satisfaction with the nature of work, co-workers, operating conditions, and contingent rewards) were also measured.

Co-worker satisfaction. This variable measures the relationship between the participant and his or her co-workers. Items measuring co-worker satisfaction were taken from Spector's (1997) Job Satisfaction Survey. Nestor (2001) showed that this relationship can affect an employee's satisfaction with the job and intention of staying with that job. A study conducted by Spector (1988) showed coefficient alphas with a range of .91 to .94. Some example items are "I enjoy my co-workers." and "There is too much bickering and fighting at work." In this sample, α was .79 for the pre-deployment sample and .88 for the post-deployment sample.

Operating conditions. Operating conditions measures the level of satisfaction with rules and procedures (Spector, 1997). Four items taken from Spector's (1997) Job Satisfaction Survey were used to measure operating conditions. A study conducted by

Spector (1988) showed coefficient alphas with a range of .91 to .94. Sample items measuring operating conditions satisfaction include "I have too much paperwork" and "Many of our rules and procedures make doing a good job difficult." As the alpha coefficients were tested in this sample, an alpha of .81 was observed for the pre-deployment sample and an alpha of .89 was observed for the post-deployment sample.

Contingent rewards. Contingent rewards reflects the extent to which individuals are satisfied with rewards given for good performance (Spector, 1997). Items measuring contingent rewards were again taken from Spector's (1997) Job Satisfaction Survey. A study conducted by Spector (1988) showed coefficient alphas with a range of .91 to .94. Sample items measuring contingent rewards include "There are few rewards for those who work here" and "I do not feel that the work I do is appreciated." In this sample, α was .79 for the pre-deployment sample and .87 for the post-deployment sample.

Deployment Information. Deployment information was obtained from all deployees in the post-deployment questionnaire. The purpose of this portion of the survey was to identify differences in the deployment experiences of the participants. First, participants were asked to report the length of the deployment and how many times a week they communicated with their homestation regarding work. Secondly, participants were asked how different their deployed job was from their homestation job. Next, participants were asked to rate the overall quality of the deployment. Sample items included "Would you recommend others to experience a deployment similar to your last deployment?" and "If given the choice to deploy within the coming year on a deployment

similar to your last one, would you accept it?" Lastly, participants were asked whether or not they took vacation prior to returning to their homestation job.

Analysis

To determine if active duty military deployments serve as a respite from home station job stressors and burnout, the data were tested to see if the post-deployment surveys reported lower levels of burnout, lower levels of emotional exhaustion, lower perceived role ambiguity, lower perceived role conflict, increased self-efficacy, increased organizational commitment, and higher job satisfaction compared to pre-deployment levels. An analysis of variance (ANOVA) and t-test were conducted on the pre- and post deployment responses to determine if any of the measured variables showed any statistically significant differences. Additionally, a t-test was used to compare the average responses of the deployed participants with the average responses for the non-deployed participants for each measure. A wave analysis was conducted and validated the generalizability of the results by finding no evidence of non-response bias (Armstrong & Overton, 1977; Lambert & Harrington, 1990).

Summary

This chapter outlined the specific sample, procedures, measures, and analysis used to accomplish this study. A questionnaire was used to measure the constructs of burnout, emotional exhaustion, role conflict, role ambiguity, self-efficacy, organizational commitment, and job satisfaction for deploying members and a non-deploying control

group. The following chapters will discuss the findings of the questionnaire and the results of the data analysis.

IV. Results

Variable descriptives

Employing scoring techniques used by Spector (1997) and Bronson and Sthultz (2004), all negatively worded items on both the pre-deployment and post-deployment questionnaire were reverse scored prior to the data analysis. The purpose of the reverse scoring was to enable clear and consistent interpretation of the results. The raw data were transformed such that high scores indicated higher levels of the measured variable and all low scores indicated lower levels of the measured variable. For example, within the raw data of contingent rewards, an individual who feels their work efforts go unappreciated would answer item 6 ("I don't feel that the work I do is appreciated") with a high number such as 6 (i.e., Agree) or 7 (i.e., Strongly Agree). However, once the data were transformed (reverse scored), his or her contingent reward score would be changed to 2 (i.e., Disagree) or 1 (i.e., Strongly Disagree), respectively, due to the fact that it is not desirable for a reward program to have employees feeling that their work efforts go unappreciated. In this way, it became consistent and clear in all variables whether or not the respondents had a high perception (a score higher than 4) or a low perception (a score lower than 4).

Descriptive statistics and correlations among the variables in the study are presented in Table 1 for the pre-deployment responses and in Table 2 for the post-deployment responses. Many of the variables were significantly and relatively strongly related to one another. The relationship between role ambiguity and role conflict had the strongest positive correlation (Pre-deployment: $r = .63$, $p < .01$; Post-deployment: $r = .75$, $p < .01$). As expected, emotional exhaustion and burnout also had a strong positive

correlation (Pre-deployment: $r = .67$, $p < .01$; Post-deployment: $r = .72$, $p < .01$). The strongest correlation between the four-facets of job satisfaction was between overall job satisfaction and contingent rewards (Pre-deployment: $r = .66$, $p < .01$; Post-deployment: $r = .68$, $p < .01$). Role conflict and role ambiguity also showed strong positive relationships (Pre-deployment: $r = .50$, $p < .01$; Post-deployment: $r = .68$, $p < .01$). Also expected was the negative correlation between role ambiguity and job satisfaction (Pre-deployment :$r = -.59$, $p < .01$; Post-deployment: $r = -.63$, $p < .01$) as well as smaller but significant negative relationship between role conflict and co-worker satisfaction (Pre-deployment :$r = -.49$, $p < .01$; Post-deployment: $r = -.59$, $p < .01$). All of these correlations seem to support the theory that burnout can result both from the presence of negative work conditions, as well as the absence of positive conditions.

Surprisingly, the magnitude of the relationships between role conflict and burnout (r=.34, $p < .01$) and role ambiguity and burnout (r=.25, $p < .01$) in the pre-deployment responses were smaller yet significant. The magnitude of these relationships grew in the post-deployment sample with correlations of .49 ($p<.01$) between role conflict and burnout and .44 ($p<.01$) between role ambiguity and burnout. The largest correlation with organizational commitment was with job satisfaction (Pre-deployment: $r = .42$, $p < .01$; Post-deployment: $r = .52$, $p < .01$), with all other variables having correlations less than .38. Of all the variables, self efficacy had the lowest correlations with all the variables. The strongest correlation for self efficacy was its negative relationship with burnout (Pre-deployment: $r = -.34$, $p < .01$; Post-deployment: $r = -.38$, $p < .01$).

Table 1. Descriptive Statistics and Correlation Matrix for Pre-deployment Variables

Variable	*M*	*SD*	*α*	1	2	3	4	5	6	7	8	9	10
1. Contingent Rewards	4.24	0.73	0.79	--									
2. Operating Conditions	4.00	1.15	0.81	.02	--								
3. Co-Workers	4.93	1.21	0.79	.35**	.11	--							
4. Job Satisfaction	4.81	1.22	0.77	.66**	-.02	.46**	--						
5. Emotional Exhaustion	3.52	1.30	0.76	-.36**	-.58**	-.34**	-.45**	--					
6. Role Conflict	3.95	1.23	0.77	-.32**	-.32**	-.49**	-.41**	.50**	--				
7. Role Ambiguity	3.06	1.19	0.77	-.39**	-.17*	-.36**	-.59**	.33**	.63**	--			
8. Organizational Commitment	5.52	0.99	0.80	.26**	.03	.23**	.42**	-.13	-.06	-.28**	--		
9. Burnout	2.80	0.75	0.79	-.23**	-.32**	-.14	-.32**	.67**	.34**	.25**	-.17*	--	
10. Self-efficacy	6.33	0.69	0.81	.09	.05	.03	.11	-.16*	.06	-.05	.31**	-.34**	--

Note. These calculations are based on the entire pre-deployee sample (N= 185), with the exception of Burnout which only had 176 responses due to missing data needed to calculate the Burnout Measure.
*$p < 0.05$
**$p < 0.01$

Table 2. Descriptive Statistics and Correlation Matrix for Post-deployment Variables

Variable	*M*	*SD*	*α*	1	2	3	4	5	6	7	8	9	10
1. Contingent Rewards	4.54	1.27	0.87	--									
2. Operating Conditions	4.22	0.77	0.89	.36**	--								
3. Co-Workers	5.01	1.16	0.88	.62**	.34**	--							
4. Job Satisfaction	4.84	1.19	0.87	.68**	.17	.53**	--						
5. Emotional Exhaustion	3.17	1.24	0.86	-.58**	-.62**	-.58**	-.52**	--					
6. Role Conflict	3.75	1.24	0.87	-.62**	-.62**	-.59**	-.53**	.68**	--				
7. Role Ambiguity	3.06	1.25	0.87	-.61**	-.46**	-.53**	-.63**	.59**	.75**	--			
8. Organizational Commitment	5.40	1.15	0.89	.38**	.22**	.32**	.52**	-.31**	-.32**	-.34**	--		
9. Burnout	2.48	0.85	0.88	-.41**	-.40**	-.40**	-.42**	.72**	.49**	.44**	-.42**	--	
10. Self-efficacy	6.37	0.63	0.90	.17*	.08	.05	.20**	-.27**	-.18*	-.20**	.30**	-.38**	--

Note. These calculations are based on the entire post-deployee sample (N= 185), with the exception of Burnout which had 176 responses due to missing data needed to calculate the Burnout Measure.
*$p < .05$
**$p < .01$

Many similarities existed between the control group and the deployment group correlations (See Tables 3 & 4 for pre-control and post-control correlations). Not surprisingly, the strongest correlation for the control group was between emotional exhaustion and burnout (Pre-control: $r = .77$, $p < .01$; Post-control: $r = .86$, $p < .01$). There was also a strong correlation between role conflict and role ambiguity (Pre-control: $r = .60$, $p < .01$; Post-control: $r = .69$, $p < .01$). Also similar to the deployment group, contingent rewards showed the strongest positive correlation with overall job satisfaction when comparing the facets of job satisfaction (Pre-control: $r = .62$, $p < .01$; Post-control: $r = .71$, $p < .01$). Despite these similarities, there were some notable differences between the control group and the deployment group. First, role conflict showed a much stronger negative correlation with contingent rewards in the control group (Pre-control: $r = -.76$, $p < .01$; Post-control: $r = -.79$, $p < .01$) when compared to the deployment group (Pre-deployment: $r = -.32$, $p < .01$; Post-deployment: $r = -.62$, $p < .01$). Secondly, organizational commitment showed a strong positive correlation with contingent rewards (Pre-control: $r = .62$, $p < .01$; Post-control: $r = .55$, $p < .01$) and a strong negative correlation with emotional exhaustion (Pre-control: $r = -.71$, $p < .01$; Post-control: $r = -.71$, $p < .01$) in the control group when compared to the deployment group where organization commitment had lower correlations with these variables (between contingent rewards: Pre-deployment: $r = .26$, $p < .01$; Post-deployment: $r = .38$, $p < .01$; between emotional exhaustion: Pre-deployment: $r = -.42$, $p < .01$; Post-control: $r = -.52$, $p < .01$). Lastly, no variables were significantly correlated with the construct of self-efficacy in the control group.

Table 3. Descriptive Statistics and Correlation Matrix for Pre-Control Variables

Variable	*M*	*SD*	*α*	1	2	3	4	5	6	7	8	9	10
1. Contingent Rewards	4.41	1.40	0.87	--									
2. Operating Conditions	3.99	1.05	0.87	.43*	--								
3. Co-Workers	5.19	1.11	0.87	.49**	.48**	--							
4. Job Satisfaction	4.86	1.19	0.86	.62**	.53**	.49**	--						
5. Emotional Exhaustion	3.28	1.42	0.88	-.37*	-.71**	-.59**	-.45**	--					
6. Role Conflict	3.92	1.16	0.86	-.76**	-.60**	-.52**	-.63**	.52**	--				
7. Role Ambiguity	3.02	1.15	0.88	-.40*	-.26	-.48**	-.53**	.15	.60**	--			
8. Organizational Commitment	5.50	0.91	0.87	.62**	.47**	.37*	.71**	-.29	-.45**	-.40*	--		
9. Burnout	2.88	0.93	0.87	-.55**	-.56**	-.56**	-.65**	.77**	.61**	.32	-.42*	--	
10. Self-efficacy	6.33	0.58	0.90	-.05	-.21	.20	.03	-.03	.05	-.23	.17	-.11	--

Note. These calculations are based on the entire pre-control group sample (N= 32).
*$p < .05$
**$p < .01$

Table 4. Descriptive Statistics and Correlation Matrix for Post-Control Variables

Variable	*M*	*SD*	*α*	1	2	3	4	5	6	7	8	9	10
1. Contingent Rewards	4.39	1.22	0.88	--									
2. Operating Conditions	3.94	1.03	0.90	.44*	--								
3. Co-Workers	4.75	1.28	0.88	.75**	.54**	--							
4. Job Satisfaction	4.83	1.25	0.88	.71**	.08	.59**	--						
5. Emotional Exhaustion	3.60	1.35	0.88	-.63**	-.62**	-.72**	-.64**	--					
6. Role Conflict	3.88	1.01	0.88	-.79**	-.45**	-.67**	-.55**	.56**	--				
7. Role Ambiguity	3.05	1.17	0.89	-.59**	-.14	-.49**	-.70**	.46**	.69**	--			
8. Organizational Commitment	4.60	0.93	0.90	.55**	-.05	.40*	.71**	-.30	-.48**	-.52**	--		
9. Burnout	2.69	0.88	0.88	-.61**	-.53**	-.62**	-.56**	.86**	.58**	.40*	-.36*	--	
10. Self-efficacy	6.32	0.68	0.91	.02	.18	.06	.00	-.29	-.07	-.09	.11	-.21	--

Note. These calculations are based on the entire post-control group sample (N= 32).
*$p < .05$
**$p < .01$

Pre- and post-deployment comparisons

To test the extent to which active duty military deployments may serve as a respite from home station job stressors and burnout, an analysis of variance was conducted on the pre- and post-deployment groups to determine if any significant differences were present. In addition, an analysis of variance was also conducted on the pre- and post- questionnaires for the control group. Due to the relatively small sample sizes (n=185 for the deployment group and n=32 for the control group), the researcher used the significance level of 0.10 as the threshold to distinguish between significant and non-significant changes in the measured variables. Das (1994) promoted the use of sample size in determining the appropriate level of significance. Based on previous research (e.g., Etzion, Eden & Lapidot, 1998; Eden, 1990; Westman & Etzion, 2001) it was hypothesized that the post-deployment group would report higher scores when compared to the pre-deployment group, while the control group would report the same or less desirable scores in their post- questionnaires when compared to their pre-questionnaires. Table 5 summarizes mean variable comparisons between both the pre- and post- questionnaires of the deployees and the control group. When the pre-deployment group was compared to the post-deployment group, significant differences were observed for the variables of contingent rewards ($p < .01$), operating conditions ($p < .05$), emotional exhaustion ($p < .01$), role conflict ($p<.10$) and burnout ($p < .01$). Generally, expected differences were observed (i.e., the post deployment group reported more desirable scores than the pre-deployment group). There were five notable exceptions; pre-deployment co-worker satisfaction, job satisfaction, role ambiguity, organizational commitment, and self-efficacy showed no significant change in the post-

deployment questionnaire ($p>.10$). In contrast, the only significant change within the control group was a decrease in organizational commitment ($p<.01$) (an expected finding considering these individuals did not experience a respite).

The majority of the results were as hypothesized, however some results were unexpected. For example, there was no change between the post-deployment and pre-deployment groups in regards to co-worker satisfaction, job satisfaction, role ambiguity, organizational commitment, and self-efficacy.

Additional ANOVAs were run to determine if there were any distinctions between the measured variables and gender, rank, and career field. Table 6 details the analysis of pre- and post-deployment groups by gender. The sample consisted of 144 males and 41 females. Both males and females had significant increases in the constructs of emotional exhaustion (males: $p<.05$, females $p<.10$) and burnout (males: $p<.01$, females $p<.05$). The males also showed significant increases in contingent rewards ($p<.01$), operating conditions ($p<.10$), and role conflict ($p<.10$), where the females had no other significant increases.

Table 5. One-Way Analysis of Variance of Pre- and Post-Deployment and Control Groups

	Deployees					Control Group				
	Pre-		Post-			Pre-		Post-		
	M	*SD*	*M*	*SD*	Change/Significance	*M*	*SD*	*M*	*SD*	Change/Significance
1. Contingent Rewards	4.24	0.73	4.54	1.27	Increase/ .00***	4.41	1.40	4.39	1.22	Decrease/ .94
2. Operating Conditions	4.00	1.15	4.22	0.77	Increase/ .03**	3.99	1.05	3.94	1.03	Decrease/ .85
3. Co-Workers	4.93	1.21	5.01	1.16	Increase/ .53	5.19	1.11	4.75	1.28	Decrease/ .14
4. Job Satisfaction	4.81	1.22	4.84	1.19	Increase/ .81	4.86	1.19	4.83	1.25	Decrease/ .90
5. Emotional Exhaustion	3.52	1.30	3.17	1.24	Decrease/.00***	3.28	1.42	3.60	1.35	Increase/ .36
6. Role Conflict	3.75	1.23	3.96	1.24	Decrease/.10*	3.92	1.16	3.88	1.01	Decrease/ .86
7. Role Ambiguity	3.06	1.19	3.06	1.25	None/	3.02	1.15	3.05	1.17	Increase/ .94
8. Organizational Commitment	5.52	0.99	5.40	1.15	Decrease/.28	5.50	0.91	4.60	0.93	Decrease/ .00***
9. Burnout	2.80	0.75	2.48	0.85	Decrease/.00***	2.88	0.93	2.69	0.88	Decrease/ .41
10. Self-efficacy	6.33	0.69	6.37	0.63	Increase/ .61	6.33	0.58	6.32	0.68	Decrease/ .94

Note. Deployees sample size = 185 in each condition (with the exception of Burnout which had an n=176 due to omitted data) and Control Group sample size = 32 in each condition.

***$p < 0.01$
**$p < 0.05$
* $p < 0.10$

Table 6. One-Way Analysis of Variance of Pre- and Post-Deployment Groups by Gender

	Male					Female				
	Pre-		Post-			Pre-		Post-		
	M	*SD*	*M*	*SD*	Change/Significance	*M*	*SD*	*M*	*SD*	Change/Significance
1. Contingent Rewards	4.26	0.71	4.60	1.25	Increase/ .00***	4.17	0.78	4.32	1.31	Increase/ .52
2. Operating Conditions	3.93	1.09	4.14	0.74	Increase/ .06*	4.25	1.31	4.51	0.78	Increase/ .26
3. Co-Workers	4.99	1.20	5.12	1.14	Increase/ .36	4.71	1.26	4.62	1.15	Decrease/ .73
4. Job Satisfaction	4.82	1.23	4.90	1.18	Increase/ .55	4.78	1.19	4.62	1.22	Decrease/ .55
5. Emotional Exhaustion	3.47	1.21	3.17	1.21	Decrease/ .04**	3.70	1.58	3.09	1.34	Decrease/ .06*
6. Role Conflict	4.01	1.15	3.79	1.22	Decrease/ .10*	3.77	1.48	3.61	1.33	Decrease/ .61
7. Role Ambiguity	3.17	1.19	3.09	1.25	Decrease/ .57	2.64	1.11	2.94	1.24	Increase/ .27
8. Organizational Commitment	5.52	0.94	5.42	1.17	Decrease/ .44	5.54	1.16	5.33	1.08	Decrease/ .40
9. Burnout	2.80	0.72	2.49	0.84	Decrease/ .00***	2.83	0.85	2.43	0.91	Decrease/ .05*
10. Self-efficacy	6.35	0.63	6.40	0.56	Increase/ .56	6.25	0.90	6.27	0.84	Increase/ .92

Note. Male sample size = 144 (with the exception of Burnout where n=138 due to omitted data) in each condition and Female sample size = 41 (with the exception of Burnout where n=38 due to omitted data) in each condition.

***$p < 0.01$
**$p < 0.05$
*$p < 0.10$

Table 7 details the analysis of pre- and post-deployment groups by rank. The ranks were broken down into two overarching categories: enlisted and officer. There were 149 enlisted personnel and 36 officers in this sample. Both enlisted personnel and officers showed significant increases in contingent rewards (enlisted: $p<.10$, officer: $p<.01$). Only the officers showed a significant increase in operating conditions ($p<.10$). Surprisingly, only the enlisted ranks showed significant decreases in both emotional exhaustion ($p<.01$) and burnout ($p<.01$). The officers did show a decrease in both emotional exhaustion and burnout, but the decreases were insignificant ($p=.81$ for emotional exhaustion and $p=.33$ for burnout).

Table 8 details the pre- and post- deployment groups by the career fields studied under this research (civil engineering, services, contracting, and finance). All career fields with the exception of contracting showed a significant decrease in burnout after the deployment. Civil engineering was the only career field to show a significant increase in operating conditions ($p<.10$) after a deployment. Similarly, services was the only career field to show a significant decrease in the level of emotional exhaustion ($p<.05$). Lastly, contracting was the only career field to show a significant increase in contingent rewards ($p<.01$).

Table 7. One-Way Analysis of Variance of Pre- and Post-Deployment Groups by Rank

	Officer					Enlisted				
	Pre-		Post-			Pre-		Post-		
	M	*SD*	*M*	*SD*	Change/Significance	*M*	*SD*	*M*	*SD*	Change/Significance
1. Contingent Rewards	4.40	0.60	5.02	1.00	Increase/ .00***	4.20	0.75	4.42	1.30	Increase/ .08*
2. Operating Conditions	3.74	1.22	4.20	0.77	Increase/ .06*	4.06	1.13	4.23	0.76	Increase/ .14
3. Co-Workers	5.22	1.05	5.40	0.92	Increase/ .44	4.86	1.24	4.91	1.19	Increase/ .71
4. Job Satisfaction	4.76	1.19	4.68	1.36	Decrease/ .79	4.82	1.23	4.88	1.15	Increase/ .68
5. Emotional Exhaustion	3.32	1.38	3.23	1.44	Decrease/ .81	3.58	1.27	3.15	1.19	Decrease/ .00***
6. Role Conflict	3.97	1.18	3.79	1.31	Decrease/ .55	3.96	1.25	3.74	1.23	Decrease/ .12
7. Role Ambiguity	3.19	1.22	3.17	1.24	Decrease/ .94	3.03	1.18	3.03	1.25	None
8. Organizational Commitment	5.65	1.05	5.55	1.27	Decrease/.73	5.49	0.97	5.36	1.11	Decrease/ .30
9. Burnout	2.72	0.86	2.49	1.04	Decrease/ .33	2.83	0.72	2.48	0.80	Decrease/ .00***
10. Self-efficacy	6.51	0.74	6.47	0.55	Decrease/ .82	6.29	0.68	6.34	0.65	Increase/ .49

Note. Officer sample size = 36 (with the exception of Burnout where n=35 due to omitted data) in each condition and Enlisted sample size = 149 (with the exception of Burnout where n=141 due to omitted data) in each condition.

***$p < 0.01$
**$p < 0.05$
*$p < 0.10$

Table 8. One-Way Analysis of Variance of Pre- and Post- Deployment Groups by Career Field

	Civil Engineering					Services				
	Pre		Post		Significance	Pre		Post		Significance
	M	SD	M	SD	(p-value)	M	SD	M	SD	(p-value)
1. Contingent Rewards	4.39	0.72	4.60	1.38	.20	4.01	0.78	4.24	1.16	.25
2. Operating Conditions	3.85	1.09	4.11	0.79	.07*	4.25	1.23	4.46	0.71	.27
3. Co-worker	5.03	1.22	5.05	1.19	.89	5.02	1.09	5.06	1.22	.87
4. Job Satisfaction	5.03	1.18	4.99	1.27	.81	4.46	1.22	4.50	1.11	.85
5. Emotional Exhaustion	3.39	1.19	3.12	1.27	.14	3.81	1.33	3.29	1.26	.04**
6. Role Conflict	3.94	1.18	3.80	1.32	.44	3.98	1.41	3.67	1.19	.24
7. Role Ambiguity	2.98	1.10	3.03	1.28	.73	3.10	1.34	3.09	1.21	.96
8. Organizational Commitment	5.45	0.95	5.31	1.21	.38	5.45	1.04	5.37	1.13	.69
9. Burnout	2.79	0.63	2.47	0.81	.00***	2.97	0.82	2.55	1.01	.03**
10. Self Efficacy	6.29	0.68	6.35	0.57	.49	6.27	0.79	6.19	0.79	.59

	Contracting					Finance				
	Pre		Post		Significance	Pre		Post		Significance
	M	SD	M	SD	(p-value)	M	SD	M	SD	(p-value)
1. Contingent Rewards	4.21	0.48	4.93	0.86	.00***	4.23	0.78	4.58	1.36	.39
2. Operating Conditions	3.98	1.10	4.11	0.75	.62	4.07	1.19	4.27	0.67	.58
3. Co-worker	4.60	1.21	4.83	1.08	.47	4.64	1.55	4.89	0.87	.58
4. Job Satisfaction	4.62	1.21	4.87	1.09	.44	5.04	1.27	5.09	1.06	.91
5. Emotional Exhaustion	3.46	1.53	3.24	1.37	.59	3.44	1.31	2.86	0.69	.13
6. Role Conflict	3.98	1.03	3.78	1.33	.54	3.98	1.29	3.66	0.85	.40
7. Role Ambiguity	3.38	1.03	3.29	1.25	.79	2.83	1.34	2.67	1.19	.73
8. Organizational Commitment	5.61	1.12	5.53	1.18	.80	5.97	0.71	5.79	0.74	.46
9. Burnout	2.61	0.92	2.56	0.88	.82	2.65	0.77	2.15	0.43	.03**
10. Self Efficacy	6.47	0.53	6.62	0.47	.27	6.56	0.60	6.63	0.37	.69

Note: Civil Engineering sample size =90 in each condition (with the exception of Burnout where n=85), Services sample size =53 in each condition (with the exception of Burnout where n=49), Contracting sample size =26 in each condition, and Finance sample size =16 in each condition

Vacation upon return from a deployment

One possible limitation to this study is the fact that a significant amount of the deployment group (n=78) took vacation (known as "leave" in the military) prior to returning to their homestation job. In fact, most Air Force organizations encourage commanders to give personnel returning from deployments up to 14 days of leave prior to returning to their homestation job. For example, the Air Force Material Command published a policy letter mandating that commanders give personnel returning from a deployment four days to travel anywhere they choose and an additional ten days of vacation in an area close to their homestation base (HQ AFMC Policy Letter, 2000). Therefore it is not truly known if the ameliorative effects shown in this study are a result of the deployment or a result of leave taken prior to returning to the homestation job. In an attempt to address this issue, the post deployment survey asked whether the participant took leave prior to returning to the homestation job, and if so, would their answers have changed if they had not taken leave prior to returning. Of the 161 participants who responded to this question (24 responses were not recorded due to technical difficulties with the survey which are addressed later in the limitations section of this paper), 78 took leave prior to returning to their homestation job. Of these 78, sixty (77%) of them noted in the survey that their responses would have shown higher levels of stress if they did not take leave prior to returning to their homestation job. Table 9 compares the pre- and post- deployment results of participants who took leave prior to returning to their homestation job and those who did not. Table 9 shows that the level of burnout decreased significantly regardless of whether the individual took leave or not. Also of note is that those who took leave showed a significant increase in contingent rewards

(p<.05), while those who didn't take leave showed a significant decrease in the level of emotional exhaustion (p<.05) and a significant increase in operating conditions (p<.10).

Testing for non-response bias

Non-response bias is simply the difference in responses between those who responded to the survey and those who didn't (Lambert & Harrington, 1990). If non-response bias does exist in data, the results are less generalizable to the entire population. Therefore, techniques suggested by Dillman (2000) to improve response rates were used in this study in an effort to reduce non-response. As a result of using Dillman's techniques, all response rates ranged from 33%-53% in this study. Despite the high response rates, there was still a concern regarding non-response bias in this study. Lambert and Harrington caution that non-response bias should be a concern in all studies with response rates lower than 40% (1990). The study considered only the data of individuals who completed both the pre-and post- deployment survey; therefore, the test for non-response bias was performed only on the post-deployment data. Data for this research was collected in three basic waves. First, the survey was sent out one-week after an email that notified the potential participants of the forthcoming post-deployment survey (Wave 1). Two-weeks later the survey was sent for a second time, reminding post-deployees that they had not yet completed the post-deployment survey (Wave 2). Lastly, two weeks after the second reminder, a final reminder was sent giving the post-deployees one last week to complete the survey (Wave 3). Cumulative response rates for these waves were 4% for the first wave, 39% for the second wave, and 53% for the third wave. The low percentage of respondents in the first wave was more than likely a result of the fact that a lot of deployees had not yet returned from the deployment. In order to

test for non-response in this study, a one-way ANOVA was used to test whether any differences existed between the three waves of data collected. Non-response bias exists if any of the variables tested show significant differences between waves (Lambert & Harrington, 1990). Table 10 details the results of the wave analysis. The non-significant ANOVA F-statistics combined with the low R-square values indicates the absence of non-response bias in this research. Therefore, the results derived from the respondents in this study can be generalized more confidently to the population of concern.

Table 9. One-Way Analysis of Variance of Pre- and Post-Deployment results comparing those who took leave and those who didn't

	Leave					No Leave				
	Pre-		Post-			Pre-		Post-		
	M	*SD*	*M*	*SD*	Change/Significance	*M*	*SD*	*M*	*SD*	Change/Significance
1. Contingent Rewards	4.23	0.62	4.58	1.26	Increase/ .03**	4.19	0.74	4.43	1.22	Increase/ .14
2. Operating Conditions	4.12	1.10	4.29	0.72	Increase/ .26	3.96	1.15	4.21	0.76	Increase/ .09*
3. Co-Workers	5.08	1.24	5.16	1.15	Increase/ .65	4.75	1.21	4.84	1.17	Increase/ .60
4. Job Satisfaction	4.73	1.24	4.71	1.20	Decrease/ .93	4.83	1.20	4.87	1.18	Increase/ .84
5. Emotional Exhaustion	4.63	1.27	4.91	1.23	Increase/ .17	4.32	1.19	4.78	1.21	Increase/ .01**
6. Role Conflict	4.14	1.22	4.39	1.22	Increase/ .20	3.90	1.22	4.13	1.25	Increase/ .25
7. Role Ambiguity	4.93	1.14	5.00	1.10	Increase/ .69	4.87	1.16	4.86	1.31	Decrease/ .93
8. Organizational Commitment	5.41	1.04	5.30	1.14	Decrease/ .54	5.63	0.91	5.49	1.14	Decrease/ .38
9. Burnout	5.18	0.73	5.57	0.86	Increase/ .00***	5.18	0.70	5.50	0.85	Increase/ .00***
10. Self-efficacy	6.21	0.72	6.28	0.57	Increase/ .52	6.43	0.64	6.45	0.59	Increase/ .79

Note. Leave sample size = 78 in each condition and No Leave sample size = 83 in each condition.

Applicable items were reverse scored such that a high score was indicative of a desired (positive) outcome.

***$p < 0.01$
**$p < 0.05$
* $p < 0.10$

Table 10. Wave Analysis of Survey Variables

	Wave #1			Wave #2			Wave #3					
	M	SD	N	M	SD	N	M	SD	N	R^2	F-Ratio	F-Prob
1. Contingent Rewards	4.69	0.85	14	4.52	1.27	124	4.56	1.39	47	0.002	0.13	0.88
2. Operating Conditions	4.07	0.61	14	4.21	0.74	124	4.31	0.87	47	0.006	0.57	0.57
3. Co-worker	5.36	0.78	14	4.97	1.20	124	4.99	1.15	47	0.008	0.69	0.50
4. Job Satisfaction	4.73	0.71	14	4.82	1.26	124	4.94	1.13	47	0.003	0.23	0.80
5. Emotional Exhaustion	3.59	0.85	14	3.11	1.23	124	3.17	1.35	47	0.01	0.94	0.39
6. Role Conflict	3.68	0.90	14	3.82	1.23	124	3.55	1.35	47	0.009	0.85	0.43
7. Role Ambiguity	3.10	0.81	14	3.14	1.30	124	2.81	1.19	47	0.013	1.18	0.31
8. Organizational Commitment	5.65	0.80	14	5.36	1.17	124	5.43	1.20	47	0.004	0.40	0.67
9. Burnout	2.62	0.83	14	2.46	0.81	117	2.49	0.98	45	0.003	0.25	0.78
10. Self Efficacy	6.27	0.67	14	6.35	0.63	124	6.45	0.64	47	0.007	0.63	0.53

Note: The sample size for burnout was less than all other variables in Wave 2 and Wave 3 due to omitted data.

Summary

This chapter details the results of the data analysis conducted on pre- and post-deployment groups and the pre- and post-control groups. As anticipated, the majority of results were as hypothesized for both the deployees and the control group. The following chapter provides a discussion of these findings and possible insights into their meanings.

V. Discussion and Conclusions

The purpose of this study was to expand the research on job stress and burnout by examining the possible respite effects of active duty military deployments. As predicted, the findings showed that active duty military deployments do indeed have a respite effect on homestation job stressors and burnout. The findings, limitations, and directions for future research will be discussed in this chapter.

Respite effect and military deployments

The results of this study verify the prediction that active duty military deployments do have a respite effect on homestation job stressors and burnout. The military members who had been deployed and were away from the stress of their homestation job returned to their homestation job perceiving reduced levels of certain job stressors and burnout. On the other hand, the military members in the control group who never left their homestation jobs reported no such changes. This research replicates findings concerning respites in the areas of vacations (Westman & Eden, 1997) and reserve service (Etzion et al., 1998). Despite the fact that military deployments themselves can be extremely stressful and taxing on the individual, deployments afford the individual an opportunity to "break-away" from the chronic job stressors of their everyday job. Bronson and Sthultz (2004) suggested that the deployment also provides the worker with the opportunity to gain a new perspective on their job due to the changed environment. This new perspective, along with the reduction of stress and burnout, may have a recuperating effect for the worker when they return to their homestation job.

Although the results of this study clearly show that deployments provide a respite effect on some homestation jobs stressors and burnout, other job stressors and moderators

showed no significant change. The specific hypotheses tested in this study are discussed below, along with possible justifications for unexpected results.

Research Question 1

It was predicted that the perceived levels of emotional exhaustion and burnout would decrease after returning home from a deployment. Indeed, the deployees showed significant decreases in both emotional exhaustion and burnout when they returned to their homestation job from a deployment. Therefore, the strains of emotional exhaustion and burnout within the military are not likely to be a result of military specific stressors such as a deployment, but more than likely a result of problems common to the civilian sector such as work overload, role conflict, and role ambiguity (Pflanz & Sonnek, 2002). Even though a 90-120 deployment has the potential to be inherently stressful, the break it provides from the everyday work setting has ameliorative effects on homestation job stressors and burnout.

Research Question 2

It was predicted that the negative perceptions of role ambiguity and role conflict would decrease after returning from a deployment. Data indicated that there was a significant decrease in the negative perception of role conflict, however, the perceptions of role ambiguity remained the same. The decrease in role conflict, like the decrease in emotional exhaustion and burnout, was more than likely a result of the "break" from the chronic job stressors of the homestation environment. By not being exposed to homestation role conflict for a period of 90-120 days, the deployees perceived the level of role conflict to decrease significantly upon their return. Surprisingly, role ambiguity did not act as expected. One possible explanation for the lack of change in role

ambiguity is the possibility that the Air Force does an excellent job of clearly defining the job roles of its military members at homestation locations. The highly structured rank system of the Air Force probably provides more clarity to the roles of military members, further justifying the low levels of role ambiguity reported in this study.

Research Question 3

It was predicted that deployments would result in an increase in the moderators of job stress and burnout (job satisfaction, organizational commitment, and self-efficacy). Considering several facets of job satisfaction, the deployment group reported significant increases in contingent rewards and operating conditions, while there were no changes in co-worker satisfaction and overall satisfaction. The increase in contingent rewards indicates that the Air Force does a good job of recognizing its personnel for good performance during a deployment. The increase in operating conditions indicates that the deployees more than likely increased their job knowledge while deployed, and therefore have a better understanding and appreciation for the rules and procedures that govern their homestation job. No significant changes were reported in either co-worker satisfaction or overall job satisfaction. One possible explanation for the lack of change in co-worker satisfaction is the possibility that the deployees enjoyed the camaraderie of other military personnel while deployed. The career fields examined in this study typically operate with Department of Defense civilians at their homestation, therefore, getting the opportunity to work solely with military members may have been a satisfying experience for them. If the deployees were more satisfied with their military co-workers during their deployment, it may have resulted in lower co-worker satisfaction scores upon their return to their homestation job. Another possible explanation is the fact that several

individuals deployed with other members from their homestation organization, therefore never getting a "break" from their homestation co-workers. One would expect no increase in co-worker satisfaction from those who did not get a break from their homestation co-workers. In regards to overall job satisfaction, one possible explanation for the lack of change is the possibility that the deployees really enjoyed their deployed job. In fact, of the 161 deployees who responded to deployment information section of the survey, 138 (80%) rated the quality of thier deployment as good or better. Typically in a deployed environment, individuals are given more responsibility and autonomy, which have been shown to result in higher levels of job satisfaction (Spector, 1997; Lawson & Savery, 2001). If this was the case, one would expect either no change or even possibly a decrease in job satisfaction when returning to a homestation job that may not be as satisfying as a deployed job.

It was predicted that the level of organizational commitment would increase as a result of a deployment. This study, however, showed no significant change in organizational commitment as a result of a deployment. In a military environment it would be expected that an opportunity to be close to a primary mission during a deployment would increase an individual's commitment to the Air Force. This was not the case for the sample in this study. One possible explanation for this finding is the possibility that the post-deployment group may have felt more committed to their deployed organization when compared to their homestation organization, although both are part of the Air Force. The survey specifically asked the deployees to rate their commitment to the Air Force in general; nevertheless, the possibility exists that some participants may have compared their deployed organization with their homestation

organization. Due to the fact that the deployees were closer to mission during their deployment, they probably felt as though they had more of a tangible impact on the mission in comparison to the impact they may have at their homestation job. Another possible answer to the finding is that the members may not have been satisfied with the mission during their deployment and discovered that their values were no longer aligned with the Air Force's values.

It was predicted that an individuals perceptions of self-efficacy would increase as a result of a deployment. Contrary to the hypothesis, no significant changes were noted as result of a deployment. In the mission-oriented nature of a deployment, one would expect an individual to increase their job knowledge and, consequently, job and self confidence. This was not the case for this sample. Bronson and Sthultz (2004) suggested that one possible explanation for this result is a lack of pre-deployment training that may have left the deployees feeling under-prepared for the demands faced during the deployment. Upon returning to his or her homestation, he or she may have felt some residual insecurity about their job due to their deployment experience.

Although this study did not test for causality, the significant changes in contingent rewards, operating conditions, emotional exhaustion, and role conflict align themselves with the literature on burnout. The increase in contingent rewards and operating conditions, as well as the decrease in role conflict and emotional exhaustion in this study verify their respective roles as antecedents to stress and burnout (Maslach, 1982; Jackson et al., 1986; Koeske & Koeske, 1989; Lee & Ashworth, 1989; Shirom, 1989; Cordes & Dougherty, 1993; Shirom, 1989; Spector, 1997; Halbesleben & Buckley, 2004). Thus, as expected, when the perceptions of contingent rewards and operating conditions increased

and emotional exhaustion and role conflict decreased for the post-deployees, burnout decreased accordingly.

Control group findings

The results of this study also verify the prediction that those who do not get a "break" from the everyday homestation job would report the same or less desirable levels of job stress and burnout. The only significant change reported in the control group was a decrease in organizational commitment. The problem here is those who are left at the homestation have to take on additional workload that was previously accomplished by those who deployed. The decreased manning also forces the organization to become more stringent on privileges such as vacation and extracurricular activities (time for college classes, appointments, etc.). In addition, military members may also be required to work longer and harder hours. This in turn probably leads to feelings of resentment towards the organization, and thus would explain the decrease in organizational commitment reported by the control group. The results reported by the control group shows one potential negative consequence of stress in the work environment and also emphasizes the importance of respites from chronic job stressors.

Differences in gender, rank, and career field

Additional tests were conducted to determine if there were any distinctions between the measured variables and gender, rank, and career field. In regards to gender, both males and females in the post deployment group showed significant decreases in both emotional exhaustion and burnout. Therefore, the ameliorative effects of deployments on homestation job stress and burnout occur regardless of gender. However, the males showed significant increases in contingent rewards, operating

conditions and a significant decrease in role conflict, whereas the females had no significant changes with these variables. Therefore, the deployment experience appeared to be more beneficial to males than it was for females in regards certain facets of job satisfaction and role conflict.

In regards to rank, both officers and enlisted personnel showed significant increases in two facets of job satisfaction: contingent rewards and operating conditions. Therefore deployments tend to improve the perception of rewards and operating conditions at the homestation regardless of rank. One unexpected result of this study was that while the enlisted personnel showed significant decreases in emotional exhaustion and burnout, the officers showed no such change. The officers reported lower levels of both burnout and emotional exhaustion in their pre-deployment response, possibly suggesting that officers are less burnt out at their homestation jobs. Another explanation may be that officers, as the leaders/managers of the organization, feel more pressure to "catch-up" with their homestation duties when they return from a deployment, and therefore do not realize the same respite effect as the enlisted personnel. Yet another possible explanation is that enlisted personnel are generally given more responsibility when deployed in comparison to their homestation job. On the other hand, officers may get slightly more responsibility in a deployed job, however, the increase in responsibility is not as great when compared to the enlisted increase. Therefore, the deployment may provide the enlisted personnel with a greater change, ultimately resulting in a more effective respite for the enlisted personnel. Further investigation into this observance is recommended.

Lastly, differences among the career fields of civil engineering, services (those responsible for managing and operating food facilities; transient and temporary lodging facilities; fitness and recreation programs and facilities; and mortuary affairs administration), contracting (procurement), and finance were investigated. All career fields that participated in this study showed significant decreases in the levels of burnout when returning from a deployment with the exception of contracting. This may be due to the fact that the contracting sample consisted of 46% officers, which is much higher when compared to the other career fields (civil engineers: 17% ; services:15%; & finance: 6%), and therefore would be the same or similar finding to one discovered in regards to rank. Another possible explanation is the fact that some of the deployees returned from this particular deployment in late September, which is the end of the fiscal year, and thus the busiest time of the year for the contracting career field. Therefore the possibility exists that some contracting personnel went back to work in an extremely stressful environment when they returned from the deployment. Despite no significant change in the level of burnout, the contracting career field was the only career field to show a significant increase in contingent rewards. Therefore, it can be assumed that the contracting career field does a good job of rewarding its personnel for work accomplished while on a deployment. Other career fields, due to their size or structure, may be less efficient at recognizing their personnel for good performance during a deployment. Lastly, civil engineering was the only career field to show a significant increase in operating conditions when returning from deployment. Therefore, the civil engineers that deployed were more satisfied with the rules and procedures that govern their homestation operations after their deployment. One possible explanation for the

increase in operating conditions is the tempo of operations in a deployed environment. In a deployed environment decisions must be made quickly and some rules and procedures that exist at the homestation may not be followed in a deployed environment. This may be frustrating for personnel who understand and appreciate the purpose of such rules and procedures. Or even more so, the deployees were given a new perspective and were able to witness first hand the problems that can arise when these rules and procedures are not followed (an increase in job knowledge). Therefore when these members return to their homestation, this new perspective gave them a greater appreciation for those rules and procedures.

With all of that said, active duty deployments, like other respites from work, had positive impacts on the military members when they returned to their homestation environment. These results provide military leaders with new insights regarding the effects of deployments on homestation job stressors and burnout. While some personnel might view military deployments as an unfortunate consequence of military service that provides no personal benefit to the individual, this may not be the case. This study showed that deployments resulted in decreased levels of job stress and burnout at the homestation job, and potentially had other positive effects such as increased levels of certain facets of job satisfaction, providing new perspectives and increasing job knowledge, and allowing for a greater appreciation of job roles.

Limitations

There are a number of limitations in this study that should be acknowledged. Possibly the biggest limitation is the fact that a significant amount of the deployment

group (n=78) took vacation (known as “leave” in the military) prior to returning to their homestation job. Although data indicated that the level of burnout decreased significantly regardless of whether the individual took leave or not, the other variables that were found to change significantly as result of the deployment in this study (particularly contingent rewards) could have been a result of the leave taken prior to returning to the homestation job rather than the deployment.

The scope of the research was limited to a subset of mission support career fields in the United States Air Force that were eligible for deployment between June and October of 2004. The restrictive nature of this sample, although selected purposefully, affects the generalizability of the results. Since only four out of a multitude of Air Force career fields were examined, the generalizability of the results was limited to those selected career fields. The career fields selected may not be representative of all Air Force career fields, particularly the operational career fields such as pilots, whose deployment experience would differ significantly from the career fields selected. Obviously, since the results are not generalizable across the Air Force, they are certainly not generalizable across the other three services (Army, Navy, Marines) in the Department of Defense.

The survey was also a source of several limitations. As with most job-stress research, this research relied solely on self-reporting measures. Measures based on self-reporting lend themselves to potential biases, such as socially desirable responses (Eden, 1990; Alpass, 1997). Also, due to the matching requirement for the pre- and post-deployment surveys, the survey was not anonymous. Although anonymity and confidentially were guaranteed once the surveys were matched, participants may have

been inclined to provide less than honest feedback. Finally, the web-based survey experienced several problems during the data collection period. Several participants completed the survey, however, the data retrieval system only collected a portion of their responses. Surveys that were not complete were not examined in this research study. Consequently, the response rates reported in this study were lower than they actually should have been. In addition, 24 of 185 post-deployment surveys that were analyzed did not include the responses for Section VI: Deployment Information. Lastly, the potential existed for participants in the post-deployment survey to rate their deployed job as opposed to their homestation job. Explicit instructions informing the participants that they were to rate only their homestation job were provided in both the email containing the link to the survey and within the survey itself, however, it is possible that some respondents nevertheless rated their deployed job.

One assumption that should be identified is that when the deployment group returned to their homestation, it was assumed that they returned to same job they occupied prior to their deployment. This may not have been the case with all the deployees. In fact, organizations often time their personnel changes with deployment departures. Therefore it is completely possible that some of deployees rated their perceptions on an entirely new and different job in the post-deployment survey. If this was the case, the perceptions reported may be a result of the new job rather than the result of the deployment.

Finally, although many of the hypothesized changes were statistically significant, some of the non-significant differences may have reached significance had the sample been larger, particularly within the control group.

Future Research

While the results of this particular study are enlightening, there are many unexplored areas that should be investigated. Future research should include a wider variety of career fields in order to increase the generalizability of the results. Tapping career fields that are exposed to combat would certainly expand the knowledge concerning deployments and job stress. In addition to more career fields, future research should focus on obtaining a larger control group. Although the control group in the study acted as predicted, a larger sample may add to its legitimacy. Further exploration into the potentially different effects deployments have on officer and enlisted personnel is also recommended. In order to achieve this goal, a larger sample of officer personnel would need to be investigated. It would also be interesting to evaluate what type of respite results in a greater source of relief, a vacation or a deployment. Further exploration into what features of a respite make it a source of relief is also recommended. Although this research focused on the job stressors and burnout of the deployed individual, it would also be interesting to see the effects of deployments on the family or support structure of the deployed individual. It would be interesting to see whether the positive effects of deployments come at the expense of their families and support structure.

Conclusion

This study's objective was to add to the body of knowledge regarding the effects of deployments on its military members. As hypothesized, deployments, like other types of respite, resulted in decreased levels of job stress and burnout for the military members at their homestation. This study also verified that military members who do not get a

respite either stay the same or show less desirable levels of stress compared to those who deploy. Therefore, despite the fact that military deployments can be extremely stressful themselves, they do offer some beneficial effects to military members upon return to their homestation environment.

Appendix A

Pre-deployment Questionnaire

Reverse scored items: 3, 6, 9, 11, 13, 14, 16, 19, 20, 23, 24, 28, 29, 35, 43, 45, 46, and 48

Contact information: If you have any questions or comments about the survey, contact Capt Ryan Johnson at the number, fax, mailing address, or e-mail address listed below.

Capt Ryan Johnson

AFIT/ENV

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2950 Hobson Way
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Please remove this page and retain for your record

Privacy Notice

The following information is provided as required by the Privacy Act of 1974:

Purpose: To obtain information regarding effects of deployments on home station job stress and burnout.

Routine Use: The survey results will be used to provide additional insight into the possible respite effects of deployments for active duty personnel. A final report will be provided to participating organizations. No analysis of individual responses will be conducted and only members of the Air Force Institute of Technology research team will be permitted access to the raw data. Although no one will have access to your data, your name is needed so that we can match your responses with those provided in a second questionnaire that will be administered when you return.

Participation: Participation is VOLUNTARY. No adverse action will be taken against any member who does not participate in this survey or who does not complete any part of the survey.

INSTRUCTIONS

- Base your answers on your own thoughts & experiences
- Please print your answers clearly when asked to write in a response or when providing comments
- Make dark marks when asked to use specific response options (feel free to use an ink pen)
- Avoid stray marks and if you make corrections erase marks completely or clearly indicate the errant response if you use an ink pen

MARKING EXAMPLES

Right	Wrong
●	⊗ ⃠ ⊙

Rank: _____
Name:_____
Email:_____

Please provide the name of an active duty co-worker of yours who performs the same or similar duties to yours on a day to day basis at your home station. Your co-worker will serve as your control group as we evaluate job stress and burnout.

Home station Co-worker Name/Rank: _____
Co-worker Email (If known)**: _____**

Section I
ATTITUDES TOWARD YOUR HOME STATION JOB

We would like to understand how you *GENERALLY FEEL* about your home station job. The following questions will help us do that. For each statement, please fill in the circle for the number that indicates the extent to which you agree the statement is true. Use the scale below for your responses.

	① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
1. I find real enjoyment in my job.	○	○	○	○	○	○	○
2. When I do a good job, I receive the recognition for it that I should receive.	○	○	○	○	○	○	○
3. There is too much bickering and fighting at work.	○	○	○	○	○	○	○
4. I like my job better than the average worker does.	○	○	○	○	○	○	○
5. I enjoy my co-workers.	○	○	○	○	○	○	○
6. I do not feel that the work I do is appreciated.	○	○	○	○	○	○	○
7. I feel a sense of pride in doing my job.	○	○	○	○	○	○	○
8. I am seldom bored with my job.	○	○	○	○	○	○	○
9. I have too much paperwork.	○	○	○	○	○	○	○
10. I would not consider taking another job.	○	○	○	○	○	○	○
11. There are few rewards for those who work here.	○	○	○	○	○	○	○
12. Most days I am enthusiastic about my job.	○	○	○	○	○	○	○
13. I sometimes feel my job is meaningless.	○	○	○	○	○	○	○

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
14. I find I have to work hard at my job because of the incompetence of people I work with.				① ② ③ ④ ⑤ ⑥ ⑦		
15. I feel fairly satisfied with my job.				① ② ③ ④ ⑤ ⑥ ⑦		
16. I have too much to do at work.				① ② ③ ④ ⑤ ⑥ ⑦		
17. I like doing the things I do at work.				① ② ③ ④ ⑤ ⑥ ⑦		
18. I like the people I work with.				① ② ③ ④ ⑤ ⑥ ⑦		
19. I don't feel my efforts are rewarded the way they should be.				① ② ③ ④ ⑤ ⑥ ⑦		
20. Many of our rules and procedures make doing a good job difficult.				① ② ③ ④ ⑤ ⑥ ⑦		
21. My job is enjoyable.				① ② ③ ④ ⑤ ⑥ ⑦		

Section II
GENERAL FEELINGS ABOUT HOME STATION JOB TENSION

We would like to understand how you *GENERALLY FEEL* about tension resulting from your home station job. The following questions will help us do that. For each statement, please fill in the circle for the number that indicates the extent to which you agree the statement is true. Use the scale below for your responses.

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
22. I have to do things that should be done differently.				① ② ③ ④ ⑤ ⑥ ⑦		
23. I know exactly what is expected of me.				① ② ③ ④ ⑤ ⑥ ⑦		
24. I feel certain about how much authority I have.				① ② ③ ④ ⑤ ⑥ ⑦		
25. I receive incompatible requests from two or more people.				① ② ③ ④ ⑤ ⑥ ⑦		

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
26. I have to work under vague directions or orders.	①	②	③	④	⑤	⑥ ⑦
27. I work under incompatible policies and guidelines.	①	②	③	④	⑤	⑥ ⑦
28. I know what my responsibilities are.	①	②	③	④	⑤	⑥ ⑦
29. I have clear, planned goals and objectives for my job.	①	②	③	④	⑤	⑥ ⑦

Section III
GENERAL FEELINGS ABOUT HOME STATION WORK LOAD

We would like to understand how you *GENERALLY FEEL* about work load resulting from your home station job. The following questions will help us do that. For each statement, please fill in the circle for the number that indicates the extent to which you agree the statement is true. Use the scale below for your responses.

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
30. I feel emotionally drained from my work.	①	②	③	④	⑤	⑥ ⑦
31. I feel overloaded at work.	①	②	③	④	⑤	⑥ ⑦
32. I feel fatigued when I get up in the morning and have to face another day on the job.	①	②	③	④	⑤	⑥ ⑦
33. I feel I am working too hard on my job.	①	②	③	④	⑤	⑥ ⑦
34. Home station bureaucratic pressures and administrative hassles hamper me in achieving my work objectives.	①	②	③	④	⑤	⑥ ⑦
35. I feel frustrated by my job.	①	②	③	④	⑤	⑥ ⑦
36. I feel like I am at the end of my rope.	①	②	③	④	⑤	⑥ ⑦
37. Please move on to the next question.						
38. Working with people all day is really a strain for me.	①	②	③	④	⑤	⑥ ⑦

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
39. My job has so many trivial demands, I often don't have time to do important duties.				① ② ③	④ ⑤ ⑥	⑦
40. I feel burned out from my work.				① ② ③	④ ⑤ ⑥	⑦
41. The responsibilities and deadlines I have at work cause stress.				① ② ③	④ ⑤ ⑥	⑦

Section IV
GENERAL FEELINGS ABOUT YOURSELF

We would like to understand how you *GENERALLY FEEL.* That is, how you feel on average regardless of your home station job. The following questions will help us do that. For each statement, please fill in the circle for the number that indicates the extent to which you agree the statement is true. Use the scale below for your responses.

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
42. I am strong enough to overcome life's struggles.				① ② ③	④ ⑤ ⑥	⑦
43. At root, I am a weak person.				① ② ③	④ ⑤ ⑥	⑦
44. I can handle the situations that life brings.				① ② ③	④ ⑤ ⑥	⑦
45. I usually feel that I am an unsuccessful person.				① ② ③	④ ⑤ ⑥	⑦
46. I often feel that there is nothing that I can do well.				① ② ③	④ ⑤ ⑥	⑦
47. I feel competent to deal effectively with the real world.				① ② ③	④ ⑤ ⑥	⑦
48. I often feel like a failure.				① ② ③	④ ⑤ ⑥	⑦
49. I usually feel I can handle the typical problems that come up in life.				① ② ③	④ ⑤ ⑥	⑦

How often do you have any of the following experiences? Please use this scale:

① Never	② Once in a great while	③ Rarely	④ Sometimes	⑤ Often	⑥ Usually	⑦ Always

50. Being tired.	①	②	③	④	⑤	⑥	⑦
51. Feeling depressed.	①	②	③	④	⑤	⑥	⑦
52. Having a good day.	①	②	③	④	⑤	⑥	⑦
53. Being physically exhausted.	①	②	③	④	⑤	⑥	⑦
54. Being emotionally exhausted.	①	②	③	④	⑤	⑥	⑦
55. Being happy.	①	②	③	④	⑤	⑥	⑦
56. Being “wiped out.”	①	②	③	④	⑤	⑥	⑦
57. “Can’t take it anymore.”	①	②	③	④	⑤	⑥	⑦
58. Being unhappy.	①	②	③	④	⑤	⑥	⑦
59. Feeling run-down.	①	②	③	④	⑤	⑥	⑦
60. Feeling trapped.	①	②	③	④	⑤	⑥	⑦
61. Feeling worthless.	①	②	③	④	⑤	⑥	⑦
62. Being weary.	①	②	③	④	⑤	⑥	⑦
63. Being troubled	①	②	③	④	⑤	⑥	⑦
64. Feeling disillusioned and resentful.	①	②	③	④	⑤	⑥	⑦
65. Being weak and susceptible to illness.	①	②	③	④	⑤	⑥	⑦
66. Feeling hopeless.	①	②	③	④	⑤	⑥	⑦
67. Feeling rejected.	①	②	③	④	⑤	⑥	⑦
68. Feeling optimistic.	①	②	③	④	⑤	⑥	⑦
69. Feeling energetic.	①	②	③	④	⑤	⑥	⑦
70. Feeling anxious.	①	②	③	④	⑤	⑥	⑦

Section V
GENERAL FEELINGS ABOUT PRE- DEPLOYMENT ORGANIZATIONAL COMMITMENT

We would like to understand how you *GENERALLY FEEL* about the Air Force. The following questions will help us do that. For each statement, please fill in the circle for the number that indicates the extent to which you agree the statement is true. Please refer to the Air Force when the term organization is used. Use the scale below for your responses.

	① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
71. I am willing to put in a great deal of effort that is beyond normal expectations in order to help the Air Force be successful.	○	○	○	○	○	○	○
72. I talk up the Air Force to my friends as a great organization to work for.	○	○	○	○	○	○	○
73. I really care about the fate of the Air Force.	○	○	○	○	○	○	○
74. I am extremely glad that I chose the Air Force to work for over others that I was considering at the time I chose.	○	○	○	○	○	○	○
75. I would accept almost any type of job assignment in order to keep working for the Air Force.	○	○	○	○	○	○	○
76. The Air Force really inspires the very best in me in the way of job performance.	○	○	○	○	○	○	○
77. I find that my values and the Air Force's values are very similar.	○	○	○	○	○	○	○
78. I am proud to tell others that I am part of the Air Force organization.	○	○	○	○	○	○	○
79. For me this is the best possible organization for which to work.	○	○	○	○	○	○	○

Section VI
BACKGROUND INFORMATION

This section contains items regarding your personal characteristics. These items are very important for statistical purposes. Respond to each item by WRITING IN THE INFORMATION requested or CHECKING THE BOX ☑ that best describes you.

1. Your current AFSC:_____

2. Time in current career field: _____ years _____ months

3. How long have you been in the Air Force? _____ years _____ months

4. Please indicate the highest level of education that you have attained.

☐ **Some High School**
☐ **High School Diploma**
☐ **Associate's degree**
☐ **Bachelor's degree**
☐ **Master's degree**
☐ **Doctorate degree**
☐ **Other (please specify)**
_____

5. What is your age? _____ years

6. What is your gender?

☐ **Male** ☐ **Female**

7. What is your marital status?

☐ **Single** ☐ **Married** ☐ **Divorced** ☐ **Engaged**

8. How many kids do you have at home?

☐ **0** ☐ **1-2** ☐ **3-4** ☐ **5-6** ☐ **More than 6**

9. How many times have you deployed in the past two years? (We define the term "deployment" as time away from home station for 60+ continuous days to perform work-related operations.)

☐ **0 times** ☐ **1 time** ☐ **2 times** ☐ **3 times** ☐ **4 times** ☐ **More than 4 times**

THANK YOU FOR PARTICIPATINGALL INFORMATION IS STRICTLY

CONFIDENTIAL

Appendix B

Post-deployment Questionnaire

Reverse scored items: 3, 6, 9, 11, 13, 14, 16, 19, 20, 23, 24, 28, 29, 35, 43, 45, 46, and 48

Contact information: If you have any questions or comments about the survey, contact Capt Ryan Johnson at the number, fax, mailing address, or e-mail address below.

Capt Ryan Johnson

AFIT/ENV BLDG 640 Box 4558
2950 Hobson Way
Wright-Patterson AFB OH 45433-7765
Email: Samuel.johnson@afit.edu
Phone: commercial (937) 361-0086
Fax: DSN 986-7302; commercial (937) 656-7302

Please remove this page and retain for your record

Privacy Notice

The following information is provided as required by the Privacy Act of 1974:

Purpose: To obtain information regarding effects of deployments on home station job stress and burnout.

Routine Use: The survey results will be used to provide additional insight into the possible respite effects of deployments for active duty personnel. A final report will be provided to participating organizations. No analysis of individual responses will be conducted and only members of the Air Force Institute of Technology research team will be permitted access to the raw data. Although no one will have access to your data, your name is needed so that we can match your responses with those provided in a second questionnaire that will be administered when you return.

Participation: Participation is VOLUNTARY. No adverse action will be taken against any member who does not participate in this survey or who does not complete any part of the survey.

INSTRUCTIONS

- Base your answers on your own thoughts & experiences
- Please print your answers clearly when asked to write in a response or when providing comments
- Make dark marks when asked to use specific response options (feel free to use an ink pen)
- Avoid stray marks and if you make corrections erase marks completely or clearly indicate the errant response if you use an ink pen

MARKING EXAMPLES

Right	Wrong
●	⊗ ⃠ ⊙

Rank: _____ Name:_____
Homestation: _____

Please indicate whether you are a member who is returning from a deployment or a member who is participating in the control group and did not deploy.

☐ **I am a member who is returning from a deployment**
☐ **I am a member who is participating in the control group and therefore did not recently deploy.**

Section I
ATTITUDES TOWARD YOUR HOME STATION JOB

We would like to understand how you *GENERALLY FEEL* about your current home station job. The following questions will help us do that. For each statement, please fill in the circle for the number that indicates the extent to which you agree the statement is true. Use the scale below for your responses.

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree

1. I find real enjoyment in my job.	①	②	③	④	⑤	⑥	⑦
2. When I do a good job, I receive the recognition for it that I should receive.	①	②	③	④	⑤	⑥	⑦
3. There is too much bickering and fighting at work.	①	②	③	④	⑤	⑥	⑦
4. I like my job better than the average worker does.	①	②	③	④	⑤	⑥	⑦
5. I enjoy my co-workers.	①	②	③	④	⑤	⑥	⑦
6. I do not feel that the work I do is appreciated.	①	②	③	④	⑤	⑥	⑦
7. I feel a sense of pride in doing my job.	①	②	③	④	⑤	⑥	⑦
8. I am seldom bored with my job.	①	②	③	④	⑤	⑥	⑦
9. I have too much paperwork.	①	②	③	④	⑤	⑥	⑦
10. I would not consider taking another job.	①	②	③	④	⑤	⑥	⑦
11. There are few rewards for those who work here.	①	②	③	④	⑤	⑥	⑦
12. Most days I am enthusiastic about my job.	①	②	③	④	⑤	⑥	⑦
13. I sometimes feel my job is meaningless.	①	②	③	④	⑤	⑥	⑦
14. I find I have to work hard at my job because of the incompetence of people I work with.	①	②	③	④	⑤	⑥	⑦
15. I feel fairly satisfied with my job.	①	②	③	④	⑤	⑥	⑦
16. I have too much to do at work.	①	②	③	④	⑤	⑥	⑦

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
17. I like doing the things I do at work.				① ② ③	④ ⑤ ⑥	⑦
18. I like the people I work with.				① ② ③	④ ⑤ ⑥	⑦
19. I don't feel my efforts are rewarded the way they should be.				① ② ③	④ ⑤ ⑥	⑦
20. Many of our rules and procedures make doing a good job difficult.				① ② ③	④ ⑤ ⑥	⑦
21. My job is enjoyable.				① ② ③	④ ⑤ ⑥	⑦

Section II
GENERAL FEELINGS ABOUT HOME STATION JOB TENSION

We would like to understand how you *GENERALLY FEEL* about tension resulting from your home station job. The following questions will help us do that. For each statement, please fill in the circle for the number that indicates the extent to which you agree the statement is true. Use the scale below for your responses.

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
22. I have to do things that should be done differently.				① ② ③	④ ⑤ ⑥	⑦
22. I know exactly what is expected of me.				① ② ③	④ ⑤ ⑥	⑦
24. I feel certain about how much authority I have.				① ② ③	④ ⑤ ⑥	⑦
25. I receive incompatible requests from two or more people.				① ② ③	④ ⑤ ⑥	⑦
26. I have to work under vague directions or orders.				① ② ③	④ ⑤ ⑥	⑦
27. I work under incompatible policies and guidelines.				① ② ③	④ ⑤ ⑥	⑦
28. I know what my responsibilities are.				① ② ③	④ ⑤ ⑥	⑦
29. I have clear, planned goals and objectives for my job.				① ② ③	④ ⑤ ⑥	⑦

Section III
GENERAL FEELINGS ABOUT HOME STATION WORK LOAD

We would like to understand how you *GENERALLY FEEL* about work load resulting from your home station job. The following questions will help us do that. For each statement, please fill in the circle for the number that indicates the extent to which you agree the statement is true. Use the scale below for your responses.

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree

30. I feel emotionally drained from my work.	①	②	③	④	⑤	⑥	⑦
31. To what extent do you feel overloaded at work?	①	②	③	④	⑤	⑥	⑦
32 feel fatigued when I get up in the morning and have to face another day on the job.	①	②	③	④	⑤	⑥	⑦
33. I feel I am working too hard on my job.	①	②	③	④	⑤	⑥	⑦
34. Home station bureaucratic pressures and administrative hassles hamper me in achieving my work objectives?	①	②	③	④	⑤	⑥	⑦
35. I feel frustrated by my job.	①	②	③	④	⑤	⑥	⑦
36. I feel like I am at the end of my rope.	①	②	③	④	⑤	⑥	⑦
37. Intentionally left blank.	①	②	③	④	⑤	⑥	⑦
38. Working with people all day is really a strain for me.	①	②	③	④	⑤	⑥	⑦
39. My job has so many trivial demands, I often don't have time to do important duties.	①	②	③	④	⑤	⑥	⑦
40. I feel burned out from my work.	①	②	③	④	⑤	⑥	⑦
41. The responsibilities and deadlines I have at work cause stress?	①	②	③	④	⑤	⑥	⑦

Section IV
GENERAL FEELINGS ABOUT HOME STATION JOB CONFIDENCE

We would like to understand how you *GENERALLY FEEL* about confidence in performing your home station job. The following questions will help us do that. For each statement, please fill in the circle for the number that indicates the extent to which you agree the statement is true. Use the scale below for your responses.

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree

42. I am strong enough to overcome life's struggles.	①	②	③	④	⑤	⑥	⑦
43. At root, I am a weak person.	①	②	③	④	⑤	⑥	⑦
44. I can handle the situations that life brings.	①	②	③	④	⑤	⑥	⑦
45. I usually feel that I am an unsuccessful person.	①	②	③	④	⑤	⑥	⑦
46. I often feel that there is nothing that I can do well.	①	②	③	④	⑤	⑥	⑦
47. I feel competent to deal effectively with the real world.	①	②	③	④	⑤	⑥	⑦
48. I often feel like a failure.	①	②	③	④	⑤	⑥	⑦
49. I usually feel I can handle the typical problems that come up in life.	①	②	③	④	⑤	⑥	⑦

How often do you have any of the following experiences? Please use this scale:

① Never	② Once in a great while	③ Rarely	④ Sometimes	⑤ Often	⑥ Usually	⑦ Always

50. Being tired.	①	②	③	④	⑤	⑥	⑦
51. Feeling depressed.	①	②	③	④	⑤	⑥	⑦
52. Having a good day.	①	②	③	④	⑤	⑥	⑦
53. Being physically exhausted.	①	②	③	④	⑤	⑥	⑦
54. Being emotionally exhausted.	①	②	③	④	⑤	⑥	⑦
55. Being happy.	①	②	③	④	⑤	⑥	⑦
56. Being “wiped out.”	①	②	③	④	⑤	⑥	⑦
57. “Can’t take it anymore.”	①	②	③	④	⑤	⑥	⑦
58. Being unhappy.	①	②	③	④	⑤	⑥	⑦
59. Feeling run-down.	①	②	③	④	⑤	⑥	⑦
60. Feeling trapped.	①	②	③	④	⑤	⑥	⑦
61. Feeling worthless.	①	②	③	④	⑤	⑥	⑦
62. Being weary.	①	②	③	④	⑤	⑥	⑦
63. Being troubled	①	②	③	④	⑤	⑥	⑦
64. Feeling disillusioned and resentful.	①	②	③	④	⑤	⑥	⑦
65. Being weak and susceptible to illness.	①	②	③	④	⑤	⑥	⑦
66. Feeling hopeless.	①	②	③	④	⑤	⑥	⑦
67. Feeling rejected.	①	②	③	④	⑤	⑥	⑦
68. Feeling optimistic.	①	②	③	④	⑤	⑥	⑦
69. Feeling energetic.	①	②	③	④	⑤	⑥	⑦
70. Feeling anxious.	①	②	③	④	⑤	⑥	⑦

Section V
GENERAL FEELINGS ABOUT POST-DEPLOYMENT ORGANIZATIONAL COMMITMENT

We would like to understand how you *GENERALLY FEEL* about your level of commitment to the Air Force as a result of your deployment. The following questions will help us do that. For each statement, please fill in the circle for the number that indicates the extent to which you agree the statement is true. Please refer to the Air Force when the term organization is used. Use the scale below for your responses.

	① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
71. I am willing to put in a great deal of effort that is beyond normal expectations in order to help my organization be successful.	①	②	③	④	⑤	⑥	⑦
72. I talk up this organization to my friends as a great organization to work for.	①	②	③	④	⑤	⑥	⑦
73. I really care about the fate of this organization.	①	②	③	④	⑤	⑥	⑦
74. I am extremely glad that I chose this organization to work for over others that I was considering at the time I chose.	①	②	③	④	⑤	⑥	⑦
75. I would accept almost any type of job assignment in order to keep working for this organization.	①	②	③	④	⑤	⑥	⑦
76. This organization really inspires the very best in me in the way of job performance.	①	②	③	④	⑤	⑥	⑦
77. I find that my values and organization's values are very similar.	①	②	③	④	⑤	⑥	⑦
78. I am proud to tell others that I am part of this organization.	①	②	③	④	⑤	⑥	⑦
79. For me this is the best possible organizations for which to work.	①	②	③	④	⑤	⑥	⑦

Section VI
DEPLOYMENT INFORMATION

This section contains items regarding your deployment. These items are very important for statistical purposes. Respond to each item by WRITING IN THE INFORMATION requested or CHECKING THE BOX ☑ that best describes you.

1. How long was your deployment? _____ months _____ days

2. Were you performing your main home station job during your last deployment?

Yes **No**

(If you answered YES go to Question #3, if you answered NO skip to Question #4)

3. While deployed, on average how many days a week did you communicate with home station office for work related issues?

Less than once **1** **2** **3** **4** **More than 4 times**

4. My home station job was similar to my role during my deployment?
(Please fill in the appropriate bubble.)

Jobs were completely different <===== =====> Jobs were the same

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree nor Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree

5. If your home station job and deployed jobs were different, what was your deployed job?

_____

_____

6. How would you rate the overall quality of your last deployment?

Poor **Fair** **Good** **Excellent** **Outstanding**

7. If given the choice to deploy within the coming year on a deployment similar to your last one, would you accept?

Yes **No**

8. Would you recommend others to experience a deployment similar to your last deployment?

Yes **No**

9. Did you take any leave prior to returning to your home station job?

Yes **No**

10. If you answered "Yes" to Question 9, do you think your answers concerning your post deployment home station job stress would have changed if you did not take leave?

Yes **No**

If "Yes," would your stress be at higher or lower levels if you did not take leave prior to returning to your home station job? Please explain.

_____
_____
_____
_____
_____
_____

THANK YOU FOR PARTICIPATING

ALL INFORMATION IS STRICTLY CONFIDENTIAL

Appendix C

E-mail Notification Letters

Initial Letter

AFIT/ENV
Bldg 640
2950 Hobson Way
Wright-Patterson AFB, OH 45433

Dear Mission Support Personnel,

We need your assistance! We here the Air Force Institute of Technology (AFIT) are exploring the effects deployments have on home station job stressors and burnout for the Air Force. To do this we are asking for feedback from active duty Air Force personnel in the civil engineering, services, contracting, and finance career fields that are either about to deploy, have recently returned from a deployment, or are not deploying at all. You have been identified as a member who is (about to deploy, have recently returned from a deployment, not deploying).

Because you have been identified a participant, we will be sending you a link to a web-based questionnaire next week. While your participation in this study is completely voluntary, every response is important for us to get a true understanding of how military deployments effect home station job stressors and burnout. So, we would greatly appreciate you taking a few minutes to complete the questionnaire.

We look forward to your feedback. Should you have any questions, please do not hesitate to contact me at Samuel.johnson@afit.edu. Thank you for your time and consideration of this matter.

Sincerely,

Samuel R. Johnson, Captain, USAF
Graduate Student, Strategic Purchasing and Supply Chain Management
Air Force Institute of Technology

Letter with Survey Link (Pre-deployment)

AFIT/ENV
Bldg 640
2950 Hobson Way
Wright-Patterson AFB OH 45433

Dear mission support personnel,

We need your help! Last week we sent you an e-mail informing you of the study we are conducting exploring the effects deployments have on home station job stressors and burnout for the Air Force.

To gather the information we have developed a brief questionnaire that can be completed by accessing the following link: http://en.afit.edu/Surveys/sjohnsonSurvey/ Being Air Force professionals, we understand the demands on your time; so, we have developed a questionnaire that will only take you 20-30 minutes to complete.

When you look at the questionnaire, you will notice that we are asking you to provide your name. Your name is collected so that we can match the data you provide on this questionnaire with your responses on a second questionnaire that will be sent a few months later. Once your data has been matched, your name will be dropped from the survey. And, all of the answers you provide are strictly confidential. You will also notice that we are asking you to provide the name of co-worker who performs the same or similar duties that you do on a day to day basis at your homestation. This person will serve as your control group during this study.

Thank you in advance for your assistance with this study effort. Should you have any questions, please do not hesitate to contact me at samuel.johnson@afit.edu.

Sincerely,

SAMUEL R. JOHNSON, Captain, USAF
Graduate Student, Strategic Purchasing and Supply Chain Management
Air Force Institute of Technology

Follow-Up Letter (Pre-deployment)

AFIT/ENV
Bldg 640
2950 Hobson Way
Wright-Patterson AFB OH 45433

Dear mission support personnel,

We recently sent you web-based questionnaire about your perceptions of your home station job. If you have already completed the questionnaire, we thank you and look forward to hearing from you when you return from your deployment. If not, we urge you to take a few moments to access the following website and complete the questionnaire: http://en.afit.edu/Surveys/sjohnsonSurvey/ .

Your answers to this survey will help us better understand the effects deployments have on home station job stressors and burnout. Every completed survey is important. Thank you again for your assistance. Should you have any questions, please do not hesitate to contact me at samuel.johnson@afit.edu.

Sincerely,

SAMUEL R. JOHNSON, Captain, USAF
Graduate Student, Strategic Purchasing and Supply Chain Management
Air Force Institute of Technology

Final Notice Letter (Pre-deployment)

AFIT/ENV
Bldg 640
2950 Hobson Way
Wright-Patterson AFB OH 45433

Dear mission support personnel,

This notice serves as your final reminder to complete the web-based questionnaire concerning your perceptions of your home station job. If you have already completed the questionnaire, no action is required, and we thank you and look forward to hearing from you when you return from your deployment. If you have not taken the questionnaire, we urge you to take a few moments to access the following website and complete the questionnaire: http://en.afit.edu/Surveys/sjohnsonSurvey/. The survey will be available to you until (insert date).

Your answers to this survey will help the Air Force better understand the effects deployments have on home station job stressors and burnout. Every completed survey is important. Thank you again for your assistance. Should you have any questions, please do not hesitate to contact me at samuel.johnson@afit.edu.

Sincerely,

SAMUEL R. JOHNSON, Captain, USAF
Graduate Student, Strategic Purchasing and Supply Chain Management
Air Force Institute of Technology

Initial Letter (Post-deployment)

AFIT/ENV
Bldg 640
2950 Hobson Way
Wright-Patterson AFB OH 45433

Dear mission support personnel,

Welcome back from your deployment! We've deployed ourselves. We understand the work you just did, and we greatly appreciate your service. Prior to you departure, you participated in an AFIT research study looking at the effects of deployments on homestation job stress and burnout. Thank you for your support then. Now we need your help one more time. Our data collection is heavily dependent on the number of post-deployment surveys we collect. In fact, we will not be able to use your pre-deployment data without your post-deployment data. Therefore your response is extremely important. The data you provide will help Air Force leaders better understand the effects of deployments on its members, and could potentially influence the future design and structure of the Air Force deployment system.

As before, we have developed a brief post-deployment questionnaire that can be completed by accessing the following link: http://en.afit.edu/Surveys/sjohnsonSurveyII/ . Since we've deployed ourselves, we understand the demands on your time now that you're back; so, we have developed a questionnaire that will take you 20-30 minutes maximum to complete. *Some folks have had trouble with the hyperlink from Microsoft Outlook, so if you are unable to hyperlink please try copying and pasting the above URL into Internet Explorer.*

As a reminder, we are again asking you to provide your name. We need to know your name to match the data you provide on this questionnaire with data you provided in your pre-deployment questionnaire. Once your data has been matched, your name will be dropped from the survey and our database. And, all of the answers you provide are strictly confidential.

Twenty minutes of your time has the potential to make a real difference! Please take a quick break to surf to our survey — http://en.afit.edu/Surveys/sjohnsonSurveyII/ — and help the Air Force understand how deployments are affecting you. Thank you in advance for your assistance with this study. Should you have any questions, please do not hesitate to contact me at: samuel.johnson@afit.edu

Sincerely,

SAMUEL R. JOHNSON, Captain, USAF
Graduate Student, Strategic Purchasing and Supply Chain Management
Air Force Institute of Technology

Follow-Up Letter (Post-deployment)

AFIT/ENV
Bldg 640
2950 Hobson Way
Wright-Patterson AFB OH 45433

Dear mission support personnel,

Welcome back from your deployment (If you are still deployed and haven't already informed me, please do so with a quick email)! Two weeks ago we sent you a post-deployment survey that was a follow-up to a survey you participated in prior to your deployment. We have not heard from you and want you to know how important your inputs are to this research effort. The survey is part of an AFIT research study looking at the effects of deployments on homestation job stress and burnout. Our data collection is heavily dependent on the number of post-deployment surveys we collect. In fact, we will not be able to use your pre-deployment data without your post-deployment data. Therefore your response is extremely important. The data you provide will help Air Force leaders better understand the effects of deployments on its members, and could potentially influence the future design and structure of the Air Force deployment system.

As before, we have developed a brief post-deployment questionnaire that can be completed by accessing the following link: http://en.afit.edu/Surveys/sjohnsonSurveyII/ . Since we've deployed ourselves, we understand the demands on your time now that you're back; so, we have developed a questionnaire that will take you 20-30 minutes maximum to complete. *Some folks have had trouble with the hyperlink from Microsoft Outlook, so if you are unable to hyperlink please try copying and pasting the above URL into Internet Explorer.*

As a reminder, we are again asking you to provide your name. We need to know your name to match the data you provide on this questionnaire with data you provided in your pre-deployment questionnaire. Once your data has been matched, your name will be dropped from the survey and our database. And, all of the answers you provide are strictly confidential.

Twenty minutes of your time has the potential to make a real difference! Please take a quick break to surf to our survey — http://en.afit.edu/Surveys/sjohnsonSurveyII/ — and help the Air Force understand how deployments are affecting you. Thank you in advance for your assistance with this study. Should you have any questions, please do not hesitate to contact me at: samuel.johnson@afit.edu

Sincerely,

SAMUEL R. JOHNSON, Captain, USAF
Graduate Student, Strategic Purchasing and Supply Chain Management
Air Force Institute of Technology

Final Notice (Post-deployment)

AFIT/ENV
Bldg 640
2950 Hobson Way
Wright-Patterson AFB OH 45433

Dear mission support personnel,

This email is serving as your FINAL REMINDER to complete the post deployment survey concerning the effects of deployments on homestation job stress and burnout. The survey will be available for you until (insert date) (*For those who are still deployed, the survey will be re-opened for you upon your return*). So if you have the time, we are very interested in your opinions of your deployment and how it effected your perceptions of your homestation job. As mentioned before, your inputs are extremely important to this study. In fact, we will not be able to use your pre-deployment data that you completed prior to your deployment without your post-deployment data contained in this survey. The data you provide will help Air Force leaders better understand the effects of deployments on its members, and could potentially influence the future design and structure of the Air Force deployment system.

As before, we have developed a brief post-deployment questionnaire that can be completed by accessing the following link: http://en.afit.edu/Surveys/sjohnsonSurveyII Since we've deployed ourselves, we understand the demands on your time now that you're back; so, we have developed a questionnaire that will take you 20-30 minutes maximum to complete.

As a reminder, we are again asking you to provide your name. We need to know your name to match the data you provide on this questionnaire with data you provided in your pre-deployment questionnaire. Once your data has been matched, your name will be dropped from the survey and our database. And, all of the answers you provide are strictly confidential.

Twenty minutes of your time has the potential to make a real difference! Please take a quick break to access our survey — http://en.afit.edu/Surveys/sjohnsonSurveyII — and help the Air Force understand how deployments are affecting you. Thank you in advance for your assistance with this study. Should you have any questions, please do not hesitate to contact me at: samuel.johnson@afit.edu

Sincerely,

SAMUEL R. JOHNSON, Captain, USAF
Graduate Student, Strategic Purchasing and Supply Chain Management
Air Force Institute of Technology

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14. ABSTRACT

The Global War on Terrorism has increased the demands placed on military members. The increased rate of deployments, coupled with the reduction in resources, has military leaders concerned that these changing demands will cause undue strain, adversely affecting the military member's quality of life. This research tests the effects of active duty military deployments on homestation job stressors and burnout. Pre- and post- deployment surveys were administered to test for any significant changes that resulted from a deployment. A group of non-deploying members was also measured during the same time frame to serve as the control group. Results showed that deployments resulted in increased levels of two facets of job satisfaction and decreased levels of role conflict, emotional exhaustion, and burnout. The only significant change noted by the control group was a decrease in the level of organizational commitment. Therefore, despite the fact that military deployments can be extremely stressful themselves, they do offer some beneficial effects to military members upon return to their homestation environment. On the other hand, those who do not get a "break" from the everyday work environment either stay the same or show less desirable levels of job stress and burnout.

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