



**AN ANALYSIS OF FACTORS THAT INFLUENCE AIR FORCE CIVIL
ENGINEER COMPANY GRADE OFFICER TURNOVER INTENTIONS**

THESIS

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AFIT/GEM/ENV/10-M10

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Abstract

Increased operational pace in support of combat operations in Iraq and Afghanistan, combined with a reduction in the number of service members, has required military members to work longer and harder. Civil engineer company grade officers are among the most heavily deployed members of the Air Force. Because of this, Air Force leaders are concerned that they will encounter retention challenges with these members. To address this issue, a questionnaire designed to capture several key attitudes individuals have about the Air Force and the civil engineer career field was administered to 364 Air Force civil engineer company grade officers. Results of this study indicated that job satisfaction, organizational commitment, availability of alternatives, perceived organizational support, operations tempo, interrole conflict, and non-work satisfaction were significantly correlated with turnover intentions. Additionally, as suggested by some of the seminal and contemporary models of employee turnover, job satisfaction and organizational commitment were shown to mediate the relationship between these attitudinal variables and an individual's intent to leave the Air Force. Theoretical and practical implications, as well as recommendations for future research, are discussed.

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Table of Contents

	Page
Abstract	iv
Acknowledgements	v
Table of Contents	vi
List of Figures	viii
List of Tables	ix
 I. Introduction and Literature Review	 1
Models of Employee Turnover	4
Job Satisfaction, Organizational Commitment, & Turnover	9
Job Satisfaction	9
Organizational Commitment	11
Economic Characteristics	13
Availability of Alternatives	13
Organizational Characteristics	15
Perceived Organizational Support	15
Operations Tempo	16
Interrole Conflict	19
Individual Characteristics	21
Life Domain	21
Summary	23
 II. Method	 25
Participants	25
Procedure	26
Measures	27
Turnover Intentions	27
Job Satisfaction	28
Organizational Commitment	29
Availability of Alternatives	30
Perceived Organizational Support	30
Operations Tempo	31
Interrole Conflict	32
Life Domain	32

	Page
III. Analysis and Results	34
Analysis	34
Direct Effects	35
Job Satisfaction and Organizational Commitment	35
Economic Characteristics	36
Organizational Characteristics	36
Individual Characteristics	40
Indirect Effects	40
IV. Discussion	43
Summary	43
Theoretical and Practical Implications	46
Limitations and Future Research	48
Conclusion	51
References	52
Appendix A: Air Force Civil Engineer Officer Attitudes Questionnaire	59
Appendix B: Validity and Reliability Evidence	70
Appendix C: Approved IRB Package	74
Appendix D: Open Ended Comments	91
Vita	137

List of Figures

Figure	Page
1. Simplified Model of Employee Turnover	7
2. Mediation Design	35

List of Tables

Table	Page
1. Summary of Turnover Model Key Elements	8
2. Summary of Military OPTEMPO-Turnover Related Studies	18
3. Means, Standard Deviations, and Correlations Between Study Variables	37
4. Mediating Effects of Job Satisfaction and Organizational Commitment on the Independent Variable-Turnover Intention Relationship	41

AN ANALYSIS OF FACTORS THAT INFLUENCE AIR FORCE CIVIL ENGINEER COMPANY GRADE OFFICER TURNOVER INTENTIONS

CHAPTER 1

INTRODUCTION & LITERATURE REVIEW

There are few areas within organizational psychology that have received as much attention as the subject of employee turnover (Cotton & Tuttle, 1986). Turnover is broadly defined as the act of an employee leaving an organization (Griffeth & Hom, 2001). It can typically be considered either involuntary or voluntary from the perspective of the employee. Involuntary turnover is not within the discretion of the employee, it is instead within the control of the organizational leaders (Holtom, Mitchell, Lee, & Eberly, 2008). An instance of involuntary turnover, or the employee being discharged, reflects the employer's decision to terminate the employment relationship for myriad reasons that may be due to market demands or the employee's performance. Voluntary turnover, in contrast, reflects the employee's decision to leave the organization when the organization would like to retain that individual (Shaw, Delery, Jenkins, & Gupta, 1998). It is the latter type of turnover that is the concern of this paper and many researchers (Holt, Rehg, Lin, & Miller, 2007; Holtom et al., 2008; Shaw et al., 1998; Cotton & Tuttle, 1986).

Voluntary turnover is of concern to organizations from both a financial and performance standpoint. When individuals leave the organization, new candidates must be recruited, selected, trained, and acclimated to the organization's culture (Holt et al., 2007). Voluntary turnover that occurs early in an employee's tenure is particularly detrimental to organizational performance as investments made in recruitment, training, and socialization do not provide immediate returns.

Each of these steps has a cost associated with it. In fact, the costs incurred due to these voluntary losses are estimated to range from a few thousand dollars to more than double the employee's annual salary (Holtom et al., 2008). In the Air Force, Holt et al. (2007) mention that the costs associated with initial screening and basic skills training for Air Force officers exceed \$300 million annually and increase significantly when specialized training is taken into consideration. Beyond the financial costs, voluntary turnover also influences performance. Many have suggested that the best performers are the most mobile professionally (e.g., Holtom et al., 2008); thus, the best performers tend to be those that voluntarily leave most often. Assuming that the new employees will attain the same level of performance as their predecessors, the organization is left with a gap in performance as newcomers are recruited, selected, trained, and socialized. If these employees do not attain the same level of performance, the organization is left with a more significant challenge. Since turnover has been found to be negatively related to performance (relationship mediated by efficiency), workforce stability is essential for efficiency to occur (Holtom et al., 2008).

Because of these costs in terms of money, time, and performance, public and private organizations make every attempt to retain quality employees (Holt et al., 2007). Moreover, researchers have been working to better understand this practical issue with more than 1,500 turnover-related publications in the past 50 years (Holtom et al., 2008). Of these studies, several have focused on the military. Much of the research regarding military members has investigated the effects of operations tempo on turnover decisions (Huffman, Adler, Dolan, & Castro, 2005; Hosek & Totten, 1998; Hosek, Kavanagh, & Miller, 2006; Fricker, 2002). Operations tempo has been described by Huffman et al. (2005) as the rate of military operations to include deployments, training exercises, temporary duty assignments, and work hours. Huffman and her

associates presented a summary of studies that examined the effects of operations tempo on turnover, which yielded inconsistent results as to the extent of the relationship.

Beyond the inconsistencies among the findings, there are two additional concerns with the military research conducted to date. One concern is the operational environment. Many of the studies performed to date have relied on data collected in the mid to late 1990s (e.g., Wisecarver, Cracraft, & Heffner, 2006; Hosek, 2004; Reed & Segal, 2000; Hosek & Totten, 1998) and are not representative of the operational environment the military is currently facing. For example, the United States Air Force has reduced end strength from over 600,000 personnel in 1986 to just over 326,000 in March, 2009 (Air Force Personnel Center, 2009). In addition, the military operations currently underway in support of Operation Iraqi Freedom and Operation Enduring Freedom in Iraq and Afghanistan require more intense and prolonged use of military power than any time since the Vietnam War (Hosek et al., 2006). This increased operational pace, combined with the reduced number of personnel, has required service members to work longer and harder (Reed & Segal, 2000). The other concern revolves around the generalizability of the findings. Several of the studies are general in nature or focus on Army members (e.g., Adler, Castro, & Bartone, 1997; Giacalone, 2000; Sticha, Sadacca, DiFazio, Knerr, Hogan, & Diana, 1999; Huffman et al., 2005). Therefore, the extent to which the findings of these studies can be generalized to the Air Force is questionable.

In order to address these concerns, this study looked beyond the Army, focusing on a sample of Air Force members who are experiencing the increased operations tempo that have come after the September 2001 terrorist attacks. More specifically, the relationship between operations tempo and turnover intentions of Air Force civil engineer company grade officers was tested. In addition, this study investigated the effects of job satisfaction, availability of

alternatives, interrole conflict, perceived organizational support, organizational commitment, and life domain with respect to turnover intentions. Air Force civil engineer company grade officers are low to mid-level managers who manage and lead in organizations responsible for the design, construction, and maintenance of facilities and infrastructure on military installations worldwide. This group is of particular interest due to high operations tempo and the costs dedicated to training and developing this group. Rolfsen (2008) reported that Air Force civil engineer officers were among the career fields with the highest deployment rates in 2008. Maj Gen Del Eulberg (November 2, 2007), the former lead civil engineer in the Air Force, has echoed this stating, “Over the past three years, civil engineers have been in a surge operations tempo that has a majority of our forces on 179-day [overseas deployment] tours, others on 120-day tours, and an increasing number on 365-day tours.” Eulberg went on to explain that due to high demand and the desire to provide commanders with stable and predictable home station missions, all civil engineers will be placed in an alternative deployment schedule. As opposed to the traditional Air Force deployment schedule which favored 4 months deployed followed by 16 months home, Airmen in this particular occupation are expected to deploy for 6 months and then have 12 months home before deploying again (Air Force Times, 2007). When taking into consideration costs in excess of \$55,000 to acquire and provide initial skills training for one civil engineer officer (Air Force Instruction 65-503, 1994), retention of these individuals becomes even more important.

Models of Employee Turnover

In an effort to help organizational leaders understand and avoid employee turnover, hundreds of qualitative and quantitative studies have investigated the phenomenon (Holt et al., 2007). During the late 1970s and early 1980s, several seminal turnover models were introduced

(e.g., Mobley, 1977; Price & Mueller, 1981; Steers & Mowday, 1981). Although the models differ in the organization of the specific steps, they share the same underlying principles of how the turnover process unfolds. That is, they tended to revolve around the idea that turnover was influenced by one's satisfaction with his or her current job, commitment to his or her organization, and these variables' influence on turnover intentions and subsequent turnover. Essentially, thoughts of quitting (i.e., turnover intentions) arise and employees begin to compare their current job with perceived alternatives when they experience dissatisfaction. If this evaluation is favorable toward their current job, thoughts of quitting subside. Otherwise, thoughts of quitting are increased and employees may commit to searching for another job and eventually leaving their current employer.

This basic idea has consistently been supported empirically. Intentions to quit or stay has been generally shown to be one of the best, if not the best, predictor of actual turnover (Griffeth, Hom, & Gaertner, 2000; Podsakoff, LePine, & LePine, 2007). In addition, meta-analyses have shown that satisfaction and commitment are significantly related to these intentions. Cotton and Tuttle (1986) found significant, negative correlations between both job satisfaction and organizational commitment and an individual's intent to leave through their meta-analysis of more than 120 turnover-related studies. Based on an aggregation of 155 studies, Tett and Meyer (1993) found that job satisfaction and commitment contribute independently to turnover, with job satisfaction being a slightly better predictor of turnover intention.

More contemporary models of employee turnover include those presented by Steel (2002) and Holtom et al. (2008). Steel (2002) has suggested that the employment search process passes through a series of three distinct stages: passive scanning, focused search, and contacting prospective employers. Passive scanning (i.e., the casual monitoring of labor market conditions)

is influenced by factors such as personality, opportunity for advancement, personal mobility, and non-work alternatives. Because data gathering in this stage relies heavily on incidental information which may be poorly focused or potentially misleading, many employees never advance beyond this stage (Steel, 2002). Those who do move on to the focused search stage, where they begin to identify concrete job leads. Much like the core models, this stage (at the center of the model) is directly influenced by job satisfaction and organizational commitment. If alternate employment opportunities are identified, the employee may progress into the final stage and may begin to contact prospective employers. It is in this stage that individuals test their beliefs and assumptions about employment alternatives. As a result, employability is evaluated and the intent to quit or stay is adjusted accordingly. Holtom et al. (2008) present a model that explains employee turnover through a narrative review of turnover literature published from 1995 to present. They suggest, like others, that withdrawal behaviors (e.g., job search, intent to search) are influenced by withdrawal cognitions (e.g., turnover intentions, advance quitting plan) and alternatives (e.g., perceived alternatives, general job availability, unemployment). In turn, withdrawal cognitions and alternatives are influenced by individual differences (e.g., ability, personality), nature of the job (e.g., routinization, job scope, autonomy), traditional attitudes (e.g., job satisfaction, organizational commitment), newer attitudes (e.g., stress and strain, exhaustion and well being), organizational context (e.g., reward system, organizational culture), and person-context interface (e.g., leadership, attachment and ties, person fit). In sum, these contemporary models have continued to emphasize the important role that job satisfaction, organizational commitment, perceived alternatives, and turnover intentions play in an individual's voluntary turnover decision.

In an effort to be both comprehensive and parsimonious, a relatively simple model of employee turnover guides this effort (presented in Figure 1). It incorporates the tenets of the original models and the more contemporary models that have been summarized (see Table 1 for how these models align with the elements of the model presented). Although it is a refinement of others' thoughts, it aligns closely with model of turnover presented by Spector (1997) and Kim, Price, Mueller, and Watson (1996). Like others, Spector suggested that turnover decisions were influenced directly by turnover intentions. These intentions are a function of job satisfaction, which in turn is influenced by organizational characteristics and individual characteristics. Organizational characteristics refer to aspects of the job and the organization like perceived organizational support, operations tempo, and interrole conflict. Individual characteristics include: life domain, personality, and family status. Extending this model, Kim et al. (1996) suggested that environmental factors also influence satisfaction. These include variables such as availability of alternatives, job availability, and unemployment.

Figure 1. Simplified Model of Employee Turnover

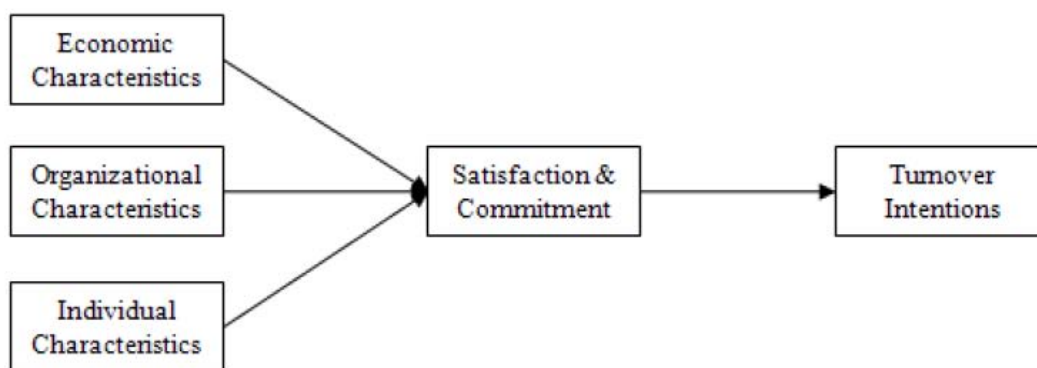


Table 1
Summary of Turnover Model Key Elements

Element	Definition	Model					
		Mobley (1977)	Price & Mueller (1981)	Steers & Mowday (1981)	Spector (1997)	Steel (2002)	Holtom et al (2008)
Turnover Intentions	Intent to stay with the organization	Intent to quit or stay	Intent to stay	Desire to stay or leave	Intent to quit	Intent to quit or stay	Withdrawal cognitions
Satisfaction	Extent to which people like or dislike their job	Job satisfaction	Job satisfaction	Job expectations and values	Job satisfaction	Job satisfaction	Job satisfaction
Commitment	Degree of commitment to the organization	Evaluate cost of quitting	Integration	Affective responsibility to job		Organizational commitment	Organizational commitment
Economic Characteristics	Economic variables external to the organization	Search for and evaluate alternatives	Opportunity	Economic and market conditions	Availability of alternatives	Labor market information	Perceived alternatives; job availability
Organizational Characteristics	Factors influenced by the organization		Communication; Integration; Distributive justice	Organizational characteristics and experiences	Organization factors	Job circumstances	Organizational culture; reward system
Individual Characteristics	Factors specific to the individual		Professionalism; Kinship responsibility	Individual characteristics	Person factors	Personality; personal mobility	Ability; personality

Elements of this general framework have been applied to test turnover intentions in the public sector as well as the military. In the most comprehensive test, Kim, Price, Mueller, and Watson (1996) considered the career intentions of U.S. Air Force physicians. In this study, they suggested that environmental (e.g., opportunity), organizational (e.g., justice perceptions), and individual (e.g., personality) characteristics influenced satisfaction and commitment. These attitudes, in turn, influenced search behaviors and intentions. Others have also studied elements of this model as they have examined turnover intentions among military members. For instance, Lytell and Drasgow (2009) linked satisfaction and commitment to turnover intentions. Evaluating economic factors, Steel (1996) studied the effect of perceived job alternatives on intent to reenlist. Examining organizational factors, Nye, Brummel, and Drasgow (2009) tested how workplace hostility and climate influenced job search behaviors among military members.

Chen and Ployhart (2006) measured the effects of several individual characteristics (e.g., rank, tenure, marital status) on turnover intentions.

With this general framework in mind, the link between several salient variables were tested in this study and reviewed. They were selected for a number of reasons. First, they align closely with the seminal and contemporary models presented, thereby fitting within the model that has been presented. Next, these variables have been linked empirically to turnover intentions. Finally, they are all appropriate within the military context.

Job Satisfaction, Organizational Commitment, & Turnover

As noted, turnover decisions are often triggered by one's satisfaction with his or her current job and commitment to his or her organization (e.g., Cotton & Tuttle, 1996; Griffeth et al., 2000; Tett & Meyer, 1993). Job satisfaction is said to be the most frequently studied variable in organizational behavior (Spector, 1997). Generally, job satisfaction is defined as an affective feeling one has toward his or her job (Tett & Meyer, 1993; Locke, 1976; Spector, 1997). It has been viewed globally where the job is viewed in totality (Locke, 19976: Spector, 1997; Tett & Meyer, 1993) or in a nuanced fashion where individuals consider particular aspects or facets of the job (e.g., pay, promotion, supervision). More importantly, job satisfaction, regardless of whether it is viewed globally or as a set of attitudes toward specific facets of the job, has implications for both the individual and the organization. At the individual level, low levels of job satisfaction have been associated with frustration, psychological withdrawal, poor health, shortened life span, and lower life satisfaction (Harpaz, 1983). At the organizational level, low levels of satisfaction have been linked to decreased performance, higher absenteeism, and increased turnover (Harpaz, 1983).

With regard to turnover, studies have consistently found a negative relationship between job satisfaction and voluntary turnover (e.g., Cotton & Tuttle, 1986; Mobley, Griffeth, Hand, & Meglino, 1979; Tett & Meyer, 1993). Like those who have examined private sector samples, recent studies involving military personnel have consistently found the same negative correlation between job satisfaction and turnover intentions (e.g., Lytell & Drasgow, 2009). In their study of military physicians, Kim et al. (1996) found a significant positive correlation between job satisfaction and intent to stay. Using a sample of more than 1,000 Army soldiers over a 2-year time period, Chen and Ployhart (2006) found a significant negative correlation between job satisfaction and turnover intentions. Based on the results of civilian and military studies that have investigated the job satisfaction-turnover intentions relationship, the following hypothesis is presented:

H1a: Job satisfaction will be negatively related to turnover intentions.

Because people can have different feelings about the various aspects of their job, the facet-based approach can provide a more complete picture of an individual's job satisfaction than the global approach (Spector, 1997). According to Spector (1997), there are nine key facets of job satisfaction: pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, coworkers, nature of work, and communication. These too have been related to turnover decision (Cotton & Tuttle, 1986; Lee, Carswell, & Allen, 2000; Kinicki, McKee-Ryan, Schriesheim, & Carson, 2002). Cotton and Tuttle (1986) found significant, negative correlations between turnover intentions and satisfaction with pay, work itself, supervision, coworkers, and promotion. Kinicki et al. (2002) reported significant, negative correlations between intent to leave and pay, promotion, coworkers, work, and supervision. Based on the results of these studies, the following series of hypotheses is presented:

H1b: Pay satisfaction will be negatively related to turnover intentions.

H1c: Promotion satisfaction will be negatively related to turnover intentions.

H1d: Satisfaction with operating conditions will be negatively related to turnover intentions.

H1e: Satisfaction with the nature of work will be negatively related to turnover intentions.

Like job satisfaction, organizational commitment plays a key role in influencing turnover intentions and subsequent turnover behaviors (Meyer, Allen, & Smith, 1993). Globally, organizational commitment is defined as individuals' emotional attachment to and involvement in an employing organization. Mowday, Porter, and Steers (1982) suggested that organizational commitment can be divided into three separate dimensions: a belief in and acceptance of organizational goals, a willingness to exert energy on behalf of the organization, and a strong desire to maintain membership in the organization. Later, in their review of organizational commitment literature, Meyer and Allen (1991) identified three distinct themes in the definition of commitment: commitment as an affective attachment to the organization (termed affective commitment), commitment as a perceived cost associated with leaving the organization (termed continuance commitment), and commitment as an obligation to remain in the organization (termed normative commitment). Interest in commitment, much like the interest in satisfaction, comes from the idea that commitment is an important part of an employee's psychological state and those that experience high organizational commitment are believed to engage in behaviors, such as organizational citizenship and high job performance, that are believed to be beneficial to the organization (Jaros, 1997). Moreover, there tend to be different on-the-job behaviors and levels of performance associated with the different forms of commitment. Specifically, Meyer and Allen (1991) suggested that affective commitment, and to somewhat a lesser extent,

normative commitment, should be positively related to job performance and organizational citizenship, where continuance commitment might be expected to be unrelated, or negatively related, to job performance and organizational citizenship.

Considering turnover, those who are more committed to the organization are generally less inclined to leave. Despite this, it has been hypothesized that employees who express these differing forms of commitment tend to remain with organizations for different reasons. Those with affective commitment remain because they want to, those with continuance commitment remain because they need to, and those with normative commitment remain because they feel they ought to (Meyer et al., 1993). Meyer and his associates (1993), for instance, found that affective and normative commitment had negative effects on intent to leave the organization, but continuance commitment had no significant effect. Hackett, Bycio, and Hausdorf (1994) reported significant, negative correlations between all three forms of commitment and the intent to leave one's job. Others have consistently found organizational commitment to be negatively related to turnover intentions (e.g., Griffeth et al., 2000; Tett & Meyer, 1993).

Although organizational commitment is of vital concern to military organizations, there have been relatively few studies conducted to examine the linkages between military members' commitment and turnover (Gade, Tiggler, & Schumm, 2003). Hom and Hulin (1981) found that organizational commitment predicted reenlistment intentions and behavior of Army National Guard members. Martin and O'Laughlin (1984) found affective commitment to be related to satisfaction, cohesion, and retention decisions of Army reservists. Teplitzky (1991) found affective commitment positively related to junior officers' intent to stay in the Army. Based on the results of civilian and military studies that have investigated the organizational commitment-turnover intention relationship, the following series of hypotheses is presented:

H2a: Organizational commitment (global) will be negatively related to turnover intentions.

H2b: Normative commitment will be negatively related to turnover intentions.

H2c: Affective commitment will be negatively related to turnover intentions.

H2d: Continuance commitment will be negatively related to turnover intentions.

Economic Characteristics

The notion that perceived alternatives influence turnover decisions has been a primary assumption in the study of turnover, as widespread consensus among theorists supports the idea that employees rarely quit their job without considering alternative jobs or roles (Griffeth, Steel, Allen, & Bryan, 2005). Based on this idea, turnover researchers have expected to find sizable relationships between measures of job availability and turnover intentions (Steel, 1996). Despite these expectations, studies investigating the effects of available alternatives on turnover decisions consistently observe weak relationships (Griffeth et al., 2005). Steel and Griffeth (1989) reported an average correlation of .13 between these two measures. Hom, Caranikas-Walker, Prussia, and Griffeth (1992) and Griffeth et al. (2000) supported these findings by reporting correlations of .14 and .11, respectively.

Historically, turnover research that has evaluated the relationship between the availability of alternatives and turnover decisions has relied on perception-based, self-report measures (Griffeth et al., 2005). In their review of perceived alternatives literature, Steel and Griffeth (1989) demonstrated that the typical instrument for measuring perceived alternatives was a one-item rating scale (e.g., Mobley, Horner, & Hollingsworth, 1978; Price & Mueller, 1981; Jackofsky & Peters, 1983). They took exception to this practice of measuring a complex referent, such as labor market cognitions, with a single-item scale, noting that if job markets vary

along multiple dimensions, the full complexity of labor market perceptions would be more accurately represented by a multidimensional measure (Griffeth et al., 2005). Accordingly, Steel and Griffeth (1989) identified several dimensions related to job market perceptions: the quantity and quality of alternatives, crystallization of alternatives (i.e., concreteness of employment alternatives), accessibility of alternatives, individual mobility, and individual access to a network of job availability information.

Using Steel and Griffeth's (1989) framework, Griffeth and his associates (2005) developed the Employment Opportunity Index (EOI), a measure of job market cognitions. Using three separate studies to build and validate their proposed measure, they ultimately identified five distinct factors to measure job market perceptions: ease of movement, desirability of movement, networking, crystallization of alternatives, and mobility. In the third study of their scale construction process, they found significant, positive correlations between the five facets and intention to quit of .13 for ease of movement, .52 for desirability of movement, .25 for networking, .32 for crystallization of alternatives, and .19 for mobility (Griffeth et al., 2005).

Steel (1996) proposed that labor market variables may be less prominent for military populations. In contrast to civilian workers who can pursue job opportunities at will, military personnel must first fulfill a specified term of service before accepting another job. Nonetheless, Steel (1996) found a significant, negative correlation ($r = -.18$) between the number of employment alternatives and reenlistment decisions of military personnel. Based on these results and the results obtained by Griffeth and his associates (2005) during the construction of the EOI, the following hypotheses are presented:

H3a: Availability of alternatives (global) will be positively related to turnover intentions.

H3b: Ease of movement will be positively related to turnover intentions.

H3c: Desirability of movement will be positively related to turnover intentions.

H3d: Networking will be positively related to turnover intentions.

H3e: Crystallization of alternatives will be positively related to turnover intentions.

H3f: Mobility will be positively related to turnover intentions.

Organizational Characteristics

Perceived organizational support. As discussed, a great deal of research has been conducted on the concept of organizational commitment (Mowday et al., 1982). What have been less thoroughly studied are employee perceptions of employer commitment to the individual (Shore & Tetrick, 1991). Where organizational commitment focuses on attitudes employees have toward the organization, employees also form perceptions about the extent to which the organization values their contributions and cares about their well-being (Eisenberger, Huntington, Hutchison, & Sowa, 1986). This has been termed perceived organizational support (POS), representing the employees' perception of the organization's attitude toward them (Shore & Tetrick, 1991). Eisenberger and his associates (1986) suggested a social exchange ideology explains the relationship between the individual's commitment to the organization and the reciprocal commitment the organization has toward the individual. Their viewpoint suggests that the employee's interpretation about the organization's commitment toward him or her influences the employee's subsequent commitment to the organization, implying that there is a degree of support that the individual expects from the organization. This includes the organization's reaction to future illnesses, mistakes, and superior performance, as well as the organization's desire to pay a fair salary and make the employee's job interesting and meaningful (Eisenberger et al., 1986). Other researchers (e.g., Eisenberger, Fasolo, & Davis-LaMastro, 1990; Shore &

Wayne, 1993; Wayne, Shore, & Liden, 1997) have supported this viewpoint through studies that showed a positive correlation between POS and affective commitment to the organization.

Several factors have been suggested as being influential in the employee's perception of support from the organization, namely job conditions (e.g., Eisenberger, Rhoades, & Cameron, 1999), supervisor support (e.g., Settoon, Bennett, & Liden, 1996), personality (e.g., Aquino & Griffeth, 1999), and human resource practices (e.g., Wayne et al., 1997). Additionally, researchers have found POS to be positively correlated with work-related outcomes such as attendance (e.g., Eisenberger et al., 1986), performance (e.g., Eisenberger et al., 1990), organizational citizenship behaviors (e.g., Shore & Wayne, 1993), and job satisfaction (Eisenberger, Cummings, Armelo, & Lynch, 1997).

With respect to turnover intentions, research has suggested that employees with a high degree of POS would be less inclined to seek and accept jobs with other organizations (Eisenberger et al., 1990). Instead, these employees express stronger feelings of affiliation with and loyalty to the organization (Eisenberger et al., 1990). Results from both private sector (e.g., Allen, Shore, & Griffeth, 2003; Wayne et al., 1997) and military (e.g., Chen & Ployhart, 2006; Wisecarver et al., 2006) studies have consistently supported this hypothesis, linking POS and the intent to quit negatively. Based on the results of these studies, the following hypothesis is presented:

H4: Perceived organizational support will be negatively related to turnover intentions.

Operations tempo. Military personnel are frequently required to spend time away from their families to attend military schools, train for war, or conduct humanitarian, peacekeeping, and combat operations (Castro & Adler, 2005). These demands suggest an organizational characteristic unique to the military, which has been termed operations tempo (OPTEMPO).

Although deployments are one of the most visible indicators, OPTEMPO is a multi-faceted construct with several operational definitions (Castro & Adler, 2005). For example, studies have measured OPTEMPO as the number of deployments (e.g., Adler et al., 1997; Huffman et al., 2005; Reed & Segal, 2000), amount of time away from home station (e.g., Sticha et al., 1999), amount of time separated from family (e.g., Giacalone, 2000), or payment of family support allowance and hostile fire pay (e.g., Hosek & Totten, 1998). Huffman and her associates (2005) incorporated many of these measures in their definition of OPTEMPO as “the rate of military operations as measured by deployments, training exercises, temporary duty assignments, and work hours.”

OPTEMPO is one of the most common explanations as to why military members choose to leave the service (Huffman et al., 2005). The importance of the OPTEMPO-turnover relationship emerged in the early 1990s, during a period when a reduced military force saw a dramatic increase in the number of military operations (Castro & Adler, 1999). Since then, numerous studies have investigated the relationship between OPTEMPO and turnover (e.g., Adler et al., 1997; Castro, Huffman, Adler, & Bienvenu, 1999; Giacalone, 2000; Hosek & Totten, 1998; Reed & Segal, 2000; Sticha et al., 1999). However, the results of these studies have yielded inconsistent findings. Some researchers have found a positive relationship (e.g., Adler et al., 1997, Giacalone, 2000), while others have found a negative relationship (e.g., Castro et al., 1999) or that the two factors are not related (e.g., Reed & Segal, 2000). A summary of OPTEMPO-turnover related studies is presented in Table 2. In their study, Huffman et al. (2005) suggested that the relationship between OPTEMPO and turnover intentions may be curvilinear. That is, turnover intentions are high at very low and very high levels of OPTEMPO and low at moderate levels of OPTEMPO.

Table 2
Summary of Military OPTEMPO-Turnover Related Studies

Researcher	Year	Population	Measurement of OPTEMPO	Findings
Giacalone	2000	Separating Army soldiers and officers	Amount of time separated from family	OPTEMPO was not a primary reason for leaving the Army
Adler, Castro, & Bartone	1997	Army soldiers and officers stationed in Europe	Number of deployments Deployment load	Positive relation between OPTEMPO and turnover
Castro, Huffman, Adler, & Bienvenu	1999	Army soldiers and officers stationed in Europe preparing for a deployment	Deployment experience	Negative relation between OPTEMPO and turnover
Sticha et al.	1999	Army soldiers and officers	Time away from home station	Modest relation between PERSTEMPO and turnover
		Army soldiers and officers	Time deployed in the last 12 months	
		Army soldiers	Time away from home station, number of deployments, length of deployments	
Hosek & Totten	1998	Cross-services	Payment of family support allowance and hostile fire pay	PERSTEMPO-turnover relation depends on level and environment of deployment
Reed & Segal	2000	U.S.-based soldiers and officers 2 months after unit had returned from Haiti	Months at sea Temporary duty	Positive relation between OPTEMPO and turnover

Note. Adapted from Huffman et al. (2005)

The contradictory evidence of the OPTEMPO-turnover relationship may be a result of the way OPTEMPO has been defined (Huffman et al., 2005). Some researchers have used aspects of OPTEMPO that are generally associated with a military member's intent to leave, where others have not. According to Huffman et al. (2005), time away from family, days at sea, or long work hours represent workload-related measures that may not be viewed as career-enhancing by the military member and have been associated with increased turnover (e.g., Giacalone, 2000; Hosek & Totten, 1998; Sticha et al., 1999). Previous deployments, time away for schooling, and training exercises, which are generally viewed as beneficial to the service member, are expected to be associated with reduced turnover (e.g., Castro et al., 1999; Hosek & Totten, 1998; Sticha et

al., 1999). This lack of a standardized OPTEMPO measure makes comparing results across studies difficult (Huffman et al., 2005).

The impact of OPTEMPO is even more important today as the U.S. military conducts combat operations in Iraq and Afghanistan. In addition to war-zone stress, operations in harsh environments, and separation from family, deployments today are longer and more frequent than during the U.S. military's peacekeeping phase (Castro & Adler, 2005). Some service members are experiencing their second and third deployments and may only be home for 6 months before their next deployment (Hosek et al., 2006). In their study, Huffman and her associates (2005) found that OPTEMPO was a concern for many junior officers, especially when deployments were regarded as too long, too frequent, too unpredictable, or poorly planned. When taking into consideration these results, results from previous studies, and the current operations tempo for Air Force civil engineer company grade officers, the following hypothesis is presented:

H5: Operations tempo will be positively related to turnover intentions.

Interrole conflict. When taking into consideration the prevalence of dual-income families and single working parents, the challenges workers face in meeting the demands of work and family have become increasingly more complex (Duxbury & Higgins, 1991). Thus, it is not surprising that the demands of work and family are not always compatible. The resources required to fulfill the demands of both roles are frequently in a state of imbalance, which can lead to feelings of conflict between these two domains (Mesmer-Magnus & Viswesvaran, 2005). Early research on the conflict between work and family failed to distinguish between which role initiated the contention (Mesmer-Magnus & Viswesvaran, 2005). Over time, however, researchers have acknowledged the direction of interference (O'Driscoll, Ilgen, & Hildreth, 1992). That is, researchers are increasingly recognizing work-family conflict as two distinct, but

related, concepts and are making a distinction between work conflicting with family and family conflicting with work (Netemeyer et al., 1996; Byron, 2005). Frone, Yardley, and Markel (1997), for example, referred to the two forms of conflict as work interference with family and family interference with work. Netemeyer and his associates (1996) referred to work-family conflict as a form of interrole conflict in which the demands of time devoted to and strain created by the job interfere with performing family-related responsibilities; similarly, they referred to family-work conflict as a form of interrole conflict in which the demands of time devoted to and strain created by the family interfere with performing work-related responsibilities. In an attempt to ease confusion associated with role conflict terminology, work-family conflict and family-work conflict will be collectively referred to as interrole conflict.

In a recent meta-analysis, Mesmer-Magnus and Viswesvaran (2005) identified eight external variables typically reviewed in the study of interrole conflict: job related stressors (e.g., work-role overload, role ambiguity), support received from the work environment (e.g., presence of work-sponsored work/family programs, work culture agreeable with conflicting family demands), organizational attachment and commitment, organizational withdrawal behaviors (e.g., intent to leave, intent to search for another job), job and career satisfaction, life satisfaction, physical and mental health, and non-work or family related influences. Results of their study revealed significant correlations with six of the eight variables. Positive correlations were found between interrole conflict and job stressors, non-work or family related stressors, and organizational withdrawal. Negative correlations were found between interrole conflict and job satisfaction, life satisfaction, and physical and mental health. These results are consistent with those of other researchers. Byron (2005) found significant positive correlations between interrole conflict and both job stress and family stress. Netemeyer et al. (1996) found significant

positive relationships between interrole conflict and job tension and organizational withdrawal and significant negative correlations between interrole conflict and both job satisfaction and life satisfaction.

Interrole conflict has been associated with an individual's intent to remain with the organization in both the private sector and the military. Studies involving civilian samples (e.g., Goff, Mount, & Jamison, 1990; Mesmer-Magnus & Viswesvaran 2005; Netemeyer et al., 1996) have consistently found positive correlations between interrole conflict and an employee's intent to leave or intent to search for another job. Asking U. S. Army soldiers how interrole conflicts related to their intent to remain, Huffman, Culbertson, and Castro (2008) found a significant negative correlation between the two. Taking into account the results of these studies, the following hypotheses are presented:

H6a: Interrole conflict (global) will be positively related to turnover intentions.

H6b: Work-family conflict will be positively related to turnover intentions.

H6c: Family-work conflict will be positively related to turnover intentions.

Individual Characteristics

The summary of the literature to this point highlights that organizational behavior researchers have extensively studied how aspects of an employee's work domain (e.g., job satisfaction, organizational commitment, perceived organizational support) influence turnover decisions. Indeed, these work attitudes do appear to play a role in employee retention and intent to leave albeit more modest than expected (Griffeth et al., 2000; Hom & Griffeth, 1995). Recognizing that factors other than work attitudes (i.e., job satisfaction, organizational commitment, and job alternatives) are important to turnover, Mitchell, Holtom, Lee, Sablinski,

and Erez (2001) presented a new construct, termed job embeddedness, that incorporated feelings that extended beyond the work attitudes. The critical aspects of this had three dimensions, namely, links, fit, and sacrifice. Links represent formal or informal relationships between a person and the organization or other people. The concept of embeddedness suggests that these links extend beyond the workplace where an employee and his or her family become entangled (or embedded) in a social, psychological, and financial web that consists of work and non-work friends, groups, the community, and the physical environment in which he or she lives. The greater the number of links (both within and beyond the organization), the more the individual is tied to the job and the organization (Mitchell et al., 2001). Fit represents the employee's compatibility with the organization and his or her community and surrounding environment. The weather, amenities, culture, outdoor activities, political and religious climate, and entertainment activities vary dramatically in different locations and geographic regions. The better the fit, the higher the likelihood the employee will feel professionally and personally tied to the organization (Mitchell et al., 2001). Sacrifice represents the perceived cost of material or psychological benefits that may be lost as a result of leaving a job. When relocation is involved, community sacrifices become an important issue, as it can be difficult to leave a community that is attractive and in which an individual is well liked and respected (Mitchell et al., 2001).

Although job embeddedness is a multidimensional construct that includes on-the-job and off-the-job factors that affect employee retention (Mitchell et al., 2001), the off-the-job factors are of primary concern in this study. Non-work domains play an important role in an employee's job satisfaction and organizational commitment, as indicated by the consistencies in the results of research studies that have investigated the relationship between these factors. Using hospital employees, Cohen (1995) found a significant positive relationship between the importance of

outside ties and organizational commitment. In their study of grocery store employees and hospital workers, Mitchell and his associates (2001) found significant positive correlations between job embeddedness (community) and both job satisfaction and organizational commitment. Later, Lee and his colleagues (2004) found significant positive correlations between off-the-job embeddedness and both job satisfaction and organizational commitment using regional operations center employees for an international financial institution as their study population.

Off-the-job factors are important determinants in why individuals decide to remain with an organization (Mitchell et al., 2001). As such, researchers have consistently found significant negative correlations between off-the-job (or community) embeddedness and both intent to leave and voluntary turnover (e.g., Mitchell et al., 2001; Lee et al., 2004). The Department of Defense (DoD) has used various survey methods to measure a service member's non-work satisfaction (e.g., Air Force Community Needs Assessment, DoD Status of Forces Survey); however, no published studies could be located that address this subject. Thus, drawing on the results from the private sector studies and the off-the-job benefits the military provides to its members (e.g., recreational facilities, clubs, entertainment facilities), the following hypothesis is presented:

H7: Life domain will be negatively related to turnover intentions.

Summary

This chapter provided a review of turnover-related literature and discussed the relationship between several economic, organizational, and individual characteristics and turnover intentions. Additionally, several seminal and contemporary models of employee

turnover were introduced. The following chapter discusses the method used in this study to measure the effects of several attitudinal variables on turnover intentions.

CHAPTER 2

METHOD

Participants

Individuals invited to participate in this study were current Air Force civil engineer company grade officers. These officers hold the rank of second lieutenant to captain and, as previously noted, are low to mid-level managers within the organization responsible for the design, construction, and maintenance of facilities and infrastructure at Air Force installations around the world.

The questionnaire was sent directly to the e-mail address of 729 officers. After removing the 42 that were returned as undeliverable, the potential number of participants was 687. Of those, 364 completed the survey, resulting in a 53% response rate. The sample included 317 (87.1%) males and 43 (11.8%) females (4 participants failed to indicate gender). The average age of the participants was 27.66 years ($SD = 4.12$). The average tenure for this sample was 4.7 years ($SD = 3.4$). With regard to marital status, 56.3% ($N = 205$) were married and 40.9% ($N = 149$) were single (never married).

One significant concern with this type of study was response bias; that is, did the sample of participants differ significantly from the population from which it was drawn. To determine whether any significant differences existed between those who responded and those who did not, a test of differences of proportions were evaluated against two key demographic variables; gender and rank. For instance, the proportion of females that responded (11.8%) was compared to those in the population (13.2%). The Fisher's exact test of differences indicated that these proportions did not differ significantly ($p = .633$). Similar findings were observed when the proportions of second lieutenants (proportion in the sample = 28.3%; proportion in the

population = 24.83%; $p = .361$), first lieutenants (proportion in the sample = 23.35%; proportion in the population = 25.38%; $p = .613$), and captains (proportion in the sample = 47.53%; proportion in the population = 49.79%; $p = .695$) from the sample were compared to those in the population. In sum, these tests suggest that the results may not be influenced by non-response bias.

Procedure

Data were collected using a web-based questionnaire. Studies indicate that this survey method has advantages and disadvantages (Cobanoglu, Warde, & Moreo, 2001; Kwak and Radler, 2002). Advantages include time reduction, cost reduction, and elimination of manual data entry. Time is reduced because questionnaires and follow-up reminders do not need to be printed and distributed to participants. Cost is reduced by eliminating the need for postage paid envelopes and follow-up post cards. Eliminating manual data entry saves processing time and reduces errors caused by incorrect entries. The major disadvantage associated with web-based questionnaires is a decreased response rate, which is generally attributed to people having limited access to or being unfamiliar with the internet. This disadvantage was minimized in that, in this study, current Air Force civil engineer officers had internet access and valid e-mail addresses. Additionally, the framework was already in place to facilitate distribution to current company grade officers. The survey was confidential. In order to facilitate future research regarding this study population (e.g., relationship between turnover intentions and actual turnover), participants were asked to provide their name. All necessary measures were taken to ensure that confidentiality was maintained.

Participants were invited through an e-mail that was sent directly to their e-mail accounts. Consistent with research that has indicated that advance notifications increase response rates

(Medlin, Roy, & Ham Chai, 1999; Solomon, 2001), a message was sent a few days prior to the distribution of the questionnaire as a pre-questionnaire notification that informed potential participants that they would soon be receiving the questionnaire. This advance notification came from the Air Force Civil Engineer (AFCE), the highest-ranking person in the civil engineer career field. A few days after the pre-notification, individuals were invited to participate through an e-mail that was sent directly to their e-mail account. This invitation came from the principal investigator on the investigation team. The invitation letter was followed by two e-mail reminders from the principal investigator that were sent out one week apart.

Measures

The questionnaire included 118 items that measured: turnover intentions, job satisfaction, organizational commitment, availability of alternatives, perceived organizational support, operations tempo, interrole conflict, and life domain. The questionnaire also contained a demographics section and an open-ended response section where participants were allowed to openly express attitudes or opinions that are unable to be captured through items in the questionnaire. All items, unless otherwise noted, were measured using a 7-point Likert-type response scale (1=*strongly disagree*, 2=*disagree*, 3=*slightly disagree*, 4=*neither agree nor disagree*, 5=*slightly agree*, 6=*agree*, 7=*strongly agree*) to assess how individuals felt about different aspects of their job. The questionnaire can be found in Appendix A. Each measure's validity and reliability evidence was researched and a summary is presented in Appendix B.

Turnover Intentions. Turnover intentions were measured using a total of nine items. The first seven were intended to capture the individual's intentions to leave the Air Force or the Civil Engineer career field. The last two items addressed the individual's desire to remain on active duty and desire to stay until retirement. An example item used to measure intent to leave the Air

Force is, “I am thinking of leaving the Air Force when my service commitment is up.” An example item that addressed desire to remain on active duty is, “Suppose that you have to decide whether to stay on active duty. Assuming that you could stay, how likely is it that you would choose to do so?” Response options for this item were: very likely, likely, neither likely nor unlikely, unlikely, and very unlikely. Similar questions have been used in the past on DoD Status of Forces Surveys and Air Force Community Needs Assessments, but the validity and reliability of these specific measures could not be determined. The coefficient alpha for this study was .90. Due to the ad hoc nature of the scale used to measure turnover intentions, this result could not be compared to those of previous studies.

Job satisfaction. Several facets of job satisfaction were measured. These facets were based on those identified by Spector (1997) as part of the Job Satisfaction Survey (JSS). They included: pay, promotion, operating conditions, and nature of work. Each was measured with four items. For the nature of work items, participants reported their level of satisfaction relative to their home station (garrison) job, their deployed job (if applicable), and their perception of future positions they may hold as a more senior civil engineer officer. An example item used to measure pay satisfaction is, “I feel I am being paid a fair amount for the work I do.” An example item used to measure promotion satisfaction is, “I am satisfied with my chances for promotion.” An example item used to measure satisfaction with operating conditions is, “I have too much to do at work.” An example item used to measure satisfaction with nature of work is, “My job is enjoyable.” In their paper, van Saane, Slutier, Verbeek, and Frings-Dresen (2003) provided considerable evidence for construct validity, content validity, and reliability of the JSS. Kinicki and his associates (2002) provided considerable evidence for the predictive validity of the Job Descriptive Index, which has been found to correlate well with the JSS (Spector, 1997). When

measured in its entirety, the coefficient alpha for job satisfaction in this study was .83.

Coefficient alphas for satisfaction with pay, promotion, operating conditions, and nature of work were .82, .68, .63, and .87, respectively. When compared to the results obtained by Spector (1997), reliabilities from this study were higher for pay and nature of work, lower for promotion, and nearly identical for operating conditions.

Organizational commitment. Organizational commitment was measured using components identified in Meyer and Allen's (1997) three-component model of organizational commitment. Components of the model are: affective commitment, normative commitment, and continuance commitment. A total of 23 items were used for this measure. Affective commitment was measured with eight items, normative commitment was measured with six items, and continuance commitment was measured with nine items. For each item, participants reported their level of commitment relative to their occupational specialty (i.e., civil engineer career field) and the Air Force. An example item used to measure affective commitment is, "I would be very happy to spend the rest of my career in this organization." An example item used to measure normative commitment is, "I do not feel any obligation to remain with my current employer." An example item used to measure continuance commitment is, "I am not afraid of what might happen if I quit my job without having another one lined up." Meyer et al. (1993) provided considerable evidence for the construct validity and reliability of the three-component model. Jaros (1997) found considerable evidence for the predictive validity of this instrument. When viewed in its entirety, the coefficient alpha for organizational commitment to the civil engineer career field and the Air Force were both .88. Coefficient alphas for affective commitment were .82 (occupation) and .79 (Air Force). Coefficient alphas for normative commitment were .84 (occupation) and .81 (career field). Coefficient alphas for continuance

commitment were .79 (occupation) and .82 (Air Force). On average, these reliabilities were slightly higher than those obtained by Meyer and Allen (1993).

Availability of alternatives. The perception of job alternatives was measured using dimensions as identified in Griffeth, Steel, Allen, and Bryan's (2005) Employment Opportunity Index (EOI). They included: ease of movement, desirability of movement, networking, crystallization of alternatives, and mobility. Ease of movement, desirability of movement, and networking were measured using three items each. Crystallization of alternatives and mobility were measured using two items each. An example item used to measure ease of movement is, "There really aren't very many jobs for people like me in today's job market." An example item used to measure desirability of movement is, "If I looked for a job, I would probably wind up with a better job than the one I have now." An example item used to measure networking is, "I have contacts in other companies who might help me line up a new job." An example item used to measure crystallization of alternatives is, "I have found a better alternative than my job." An example item used to measure mobility is, "I am unable to move to another place of residence now even if a better job came along." Griffeth et al. (2005) provided considerable evidence of construct validity, predictive validity, and reliability of the EOI. In this study, the coefficient alpha for availability of alternatives was .84. Coefficient alphas for ease of movement, desirability of movement, networking, crystallization of alternatives, and mobility were .84, .91, .87, .71, and .61, respectively. When compared with the results obtained by Griffeth and his associates (2005), reliabilities from this study were higher for ease of movement, desirability of movement, and networking. They were lower for crystallization of alternatives and mobility.

Perceived organizational support. Perceived organizational support (POS) was measured using Eisenberger, Huntington, Hutchison, and Sowa's (1986) Survey of Perceived

Organizational Support (SPOS). The 9 items with the highest factor loadings from the 16-item short version of the SPOS were used for this measure. This shortened version has been used in previous research by Eisenberger et al. (1990) as well as Wayne et al. (1997). For each item, participants reported the perceived degree of organizational support they receive relative to their occupational specialty (i.e., civil engineer career field) and the Air Force. An example item used to measure POS is, “The organization takes pride in my accomplishments at work.”

Considerable evidence was found for the construct validity (Shore & Tetrick, 1991), predictive validity, and reliability (Eisenberger et al., 1986) of the Survey of Perceived Organizational Support. In this study, coefficient alphas for perceived organizational support were .92 (occupation) and .90 (Air Force). These reliabilities were slightly lower than those reported in previous studies (e.g., Eisenberger et al., 1986; Eisenberger et al., 1990).

Operations tempo. Operations tempo data were collected using a total of 14 items. For the first six items, participants were asked to indicate the number deployments, training exercises, temporary duty assignments, and extended work days they had within a given time period. The last eight items were intended to measure the individual’s level of satisfaction with deployments and temporary duty assignments. An example item where the participant entered a numeric value is, “Since entering the Air Force, how many deployments have you been on? (Include the current deployment if you are currently deployed).” An example item used to measure deployment satisfaction is, “How satisfied are you with the length (days deployed) of your deployments.” Questions of this nature have been used on DoD Status of Forces Surveys and Air Force Community Needs Assessments. Several researchers have studied the effect of operations tempo on turnover (e.g., Adler et al., 1997; Castro et al., 1999; Reed & Segal, 2000); still, there do not appear to be standardized methods available, making it difficult to select the

most valid and reliable measure. In this study, the coefficient alpha was .77. Due to the ad hoc nature of the scale used to measure operations tempo, this result could not be compared to those of previous studies.

Interrole conflict. Interrole conflict consists of Work-Family Conflict (WFC) and Family-Work Conflict (FWC) and was measured using work-family and family-work scales developed by Netemeyer, Boles, and McMurrian (1996). WFC exists when the demands of the job interfere with family-related responsibilities. FWC exists when family demands interfere with work-related responsibilities (Netemeyer et al., 1996). Each was measured using five items. An example item used to measure WFC is, “The demands of my work interfere with my home and family life.” An example item used to measure FWC is, “The demands of my family or spouse/partner interfere with work-related activities.” Netemeyer et al. (1996) provided considerable evidence for the construct validity, predictive validity, and reliability of the work-family and family-work conflict scales. In this study, the coefficient alpha for interrole conflict was .89. Individual coefficient alphas were .92 (WFC) and .89 (FWC). These reliabilities were higher than those reported by Netemeyer and his associates (1996).

Life domain. Life domain was measured using a total of eight items intended to capture the individual’s non-work satisfaction. All items were measured using an 8-point Likert-type response scale (0=N/A, 1=very dissatisfied, 2=dissatisfied, 3=somewhat dissatisfied, 4=neither satisfied nor dissatisfied, 5=somewhat satisfied, 6=satisfied, 7=very satisfied). An example item used to measure life domain addressed the individual’s level of satisfaction with the entertainment, recreation, and club facilities that are available. Similar questions have been used on DoD Status of Forces Surveys and Air Force Community Needs Assessments. The extent to which this measure was valid and reliable was questionable. Despite this shortcoming, the extent

to which military members are satisfied with their quality of life outside of work was expected to be relevant to their turnover intentions. In this study, the coefficient alpha was .76. Due to the ad hoc nature of the scale used to measure life domain, this result could not be compared to those of previous studies.

Summary

This chapter described the study participants and outlined the research design and methodology used to determine which variables influence the turnover intentions of Air Force civil engineer company grade officers. Measures deemed pertinent to this study were discussed and reliabilities of those measures were presented. The following chapter discusses the procedures used to analyze the survey data and the results of that analysis.

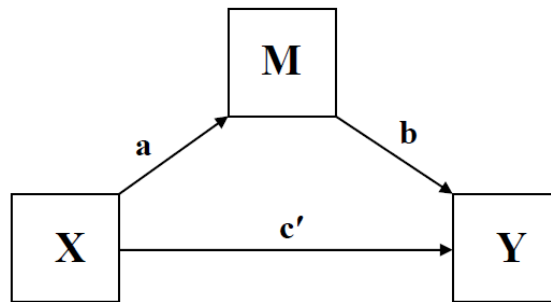
CHAPTER 3

ANALYSIS & RESULTS

Analysis

All data were analyzed using the Statistical Package for the Social Sciences (SPSS). Prior to any analysis, all negatively phrased items were reverse coded. Direct effects, or the independent variable directly influencing the dependent variable, as well indirect effects, or a mediator variable (M) carrying the influence of the independent variable (X) to the dependent variable (Y) were tested. See Figure 2 for a graphical representation of a mediation design. Direct effects (e.g., effect of job satisfaction on turnover intentions) were measured using a bivariate correlation. Indirect effects (e.g., job satisfaction mediating the relationship between perceived organizational support and turnover intentions) were measured using a mediated regression, aided by an SPSS macro developed by Preacher and Hayes (2004). This macro estimates the size of the indirect effect using two methods: the Sobel test and bootstrapping. For the Sobel test, the indirect effect of the independent variable (X) on the dependent variable (Y) is the product of the X-M path (a) and the M-Y path (b), or ab . The ratio of ab to an estimated standard error is calculated and a Z-value and significance are computed (Preacher & Hayes, 2008). Bootstrapping involves repeatedly sampling from the data set and estimating the indirect effect in each resampled set of data. By repeating this process thousands of times, the approximate distribution of ab is built and used to construct a confidence interval for the indirect effect. For this study, a bootstrap value of 5000 was used.

Figure 2. Mediation Design



Direct Effects

Descriptive statistics are presented in Table 3. This table reports the means, standard deviations, and correlations between the study variables.

Job Satisfaction and Organizational Commitment. Job satisfaction was measured both globally and with respect to four individual facets: pay, promotion, operating conditions, and nature of work. When viewed globally, job satisfaction was negatively related to turnover intentions ($r = -.42, p < .01$). This was consistent with Hypothesis 1a. Consistent with Hypotheses 1b through 1e, satisfaction with pay ($r = -.23, p < .01$), promotion ($r = -.23, p < .01$), operating conditions ($r = -.23, p < .01$), and nature of work ($r = -.42, p < .01$) were all negatively related to turnover intentions.

Organizational commitment was measured relative to the civil engineer career field as well as the Air Force, both globally and with respect to the three components of commitment (e.g., affective, normative, continuance). When viewed globally, organizational commitment to the civil engineer career field ($r = -.57, p < .01$) and the Air Force ($r = -.41, p < .01$) were both negatively related to turnover intentions. This was consistent with Hypothesis 2a. With respect to the civil engineer career field, affective, normative, and continuance commitment were all negatively related to turnover intentions ($r = -.55, p < .01$; $r = -.55, p < .01$; $r = -.25, p < .01$,

respectively). With respect to the Air Force, affective, normative, and continuance commitment were also negatively related to turnover intentions ($r = -.41, p < .01$; $r = -.41, p < .01$; $r = -.20, p < .01$, respectively). These results were consistent with Hypotheses 2b through 2d.

Economic Characteristics. The perceived availability of job alternatives was measured in its entirety, as well as with respect to five dimensions: ease of movement, desirability of movement, networking, crystallization of alternatives, and mobility. Globally, the perceived availability of job alternatives was positively related to turnover intentions ($r = .32, p < .01$). This was consistent with Hypothesis 3a. Consistent with Hypotheses 3c and 3e, desirability of movement ($r = .52, p < .01$) and crystallization of alternatives ($r = .39, p < .01$) were positively related to turnover intentions. Ease of movement ($r = -.01, ns, p > .05$), networking ($r = .10, ns, p > .05$), and mobility ($r = .02, ns, p > .05$) were not significantly related to turnover intentions. This was inconsistent with Hypotheses 3b, 3d, and 3f, respectively, which posited that there would be a significant relationship.

Organizational Characteristics. The perception of the degree of support the individual receives from the organization was measured relative to the civil engineer career field and the Air Force. With respect to the civil engineer career field, POS was negatively related to turnover intentions ($r = -.46, p < .01$). With respect to the Air Force, POS was also negatively related to turnover intentions ($r = -.39, p < .01$). These results were consistent with Hypothesis 4.

Operations tempo was measured by the individual's number of deployments, training exercises, temporary duty assignments, and work hours. Based on the current rate of military operations, it was hypothesized to be positively related to turnover intentions. Inconsistent with Hypothesis 5, results showed a negative relationship between operations tempo and turnover intentions ($r = -.30, p < .01$).

Table 3
Means, Standard Deviations, and Correlations Between Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8
1. Turnover Intentions	3.96	1.46								
2. Job Satisfaction	4.33	0.80	-.42**							
3. JS- Pay	4.71	1.16	-.23**	.70**						
4. JS- Promotion	4.77	0.95	-.23**	.66**	.46**					
5. JS- Operating Conditions	3.41	1.05	-.23**	.68**	.37**	.21**				
6. JS- Nature of Work	4.41	1.45	-.42**	.71**	.18**	.28**	.34**			
7. Organizational Commitment- CE	3.99	0.88	-.57**	.35**	.16**	.20**	.22**	.35**		
8. Affective Commitment- CE	4.59	1.08	-.55**	.42**	.17**	.20**	.21**	.51**	.78**	
9. Normative Commitment- CE	3.98	1.31	-.55**	.30**	.12*	.15**	.17**	.34**	.87**	.68**
10. Continuance Commitment- CE	3.47	1.06	-.25**	.11*	.08	.12*	.13*	.00	.70**	.17**
11. Organizational Commitment- AF	4.06	0.89	-.41**	.37**	.27**	.17**	.29**	.28**	.56**	.30**
12. Affective Commitment- AF	4.52	1.01	-.41**	.47**	.28**	.21**	.29**	.46**	.37**	.48**
13. Normative Commitment- AF	4.09	1.24	-.41**	.32**	.21**	.13*	.23**	.27**	.51**	.29**
14. Continuance Commitment- AF	3.63	1.16	-.20**	.13*	.16**	.06	.17**	.00	.44**	.00
15. Availability of Alternatives	4.63	0.86	.32**	-.33**	-.33**	-.15**	-.28**	-.15**	-.38**	-.11*
16. Ease of Movement	5.43	1.09	-.01	-.03	-.09	.04	-.12*	.07	-.17**	.12*
17. Desirability of Movement	4.39	1.30	.52**	-.48**	-.41**	-.23**	-.29**	-.37**	-.42**	-.34**
18. Networking	4.78	1.33	.10	-.16**	-.22**	-.12*	-.15**	.01	-.17**	.02
19. Crystallization of Alternatives	2.93	1.45	.39**	-.35**	-.33**	-.23**	-.25**	-.17**	-.22**	-.17**
20. Mobility	5.23	1.45	.02	.00	.00	.09	-.07	-.02	-.24**	.04
21. Perceived Organizational Support- CE	4.39	1.16	-.46**	.55**	.32**	.39**	.33**	.47**	.51**	.61**
22. Perceived Organizational Support- AF	4.09	1.10	-.39**	.59**	.39**	.42**	.39**	.43**	.27**	.31**
23. Operations Tempo	3.90	1.00	-.30**	.45**	.39**	.20**	.37**	.26**	.22**	.25**
24. Interrole Conflict	3.80	1.04	.08	-.28**	-.33**	-.06	-.38**	-.02	-.02	.02
25. Work-Family Conflict	4.67	1.41	.11*	-.30**	-.33**	-.07	-.42**	-.04	-.09	.00
26. Family-Work Conflict	2.92	1.10	.00	-.14**	-.20**	-.03	-.19**	.02	.08	.04
27. Life Domain	3.62	1.10	-.16**	.39**	.37**	.31**	.23**	.19**	.10	.19**

Note. JS=Job Satisfaction; CE=Civil Engineer Career Field; AF=Air Force

* $p < .05$

** $p < .01$

Table 3 (continued)

Variable	9	10	11	12	13	14	15	16	17	18
1. Turnover Intentions										
2. Job Satisfaction										
3. JS- Pay										
4. JS- Promotion										
5. JS- Operating Conditions										
6. JS- Nature of Work										
7. Organizational Commitment- CE										
8. Affective Commitment- CE										
9. Normative Commitment- CE										
10. Continuance Commitment- CE	.40**									
11. Organizational Commitment- AF	.44**	.55**								
12. Affective Commitment- AF	.31**	.08	.76**							
13. Normative Commitment- AF	.61**	.31**	.84**	.64**						
14. Continuance Commitment- AF	.18**	.79**	.77**	.25**	.44**					
15. Availability of Alternatives	-.25**	-.49**	-.58**	-.28**	-.40**	-.63**				
16. Ease of Movement	-.06	-.41**	-.34**	-.04	-.18**	-.51**	.72**			
17. Desirability of Movement	-.38**	-.26**	-.46**	-.40**	-.41**	-.31**	.67**	.32**		
18. Networking	-.06	-.34**	-.33**	-.07	-.19**	-.46**	.74**	.47**	.25**	
19. Crystallization of Alternatives	-.14**	-.20**	-.37**	-.28**	-.28**	-.32**	.67**	.25**	.40**	.46**
20. Mobility	-.15**	-.42**	-.40**	-.11*	-.27**	-.50**	.48**	.34**	.13*	.15**
21. Perceived Organizational Support- CE	.49**	.14*	.22**	.33**	.23**	.02	-.22**	.04	-.41**	-.07
22. Perceived Organizational Support- AF	.26**	.09	.50**	.59**	.46**	.18**	-.33**	-.08	-.44**	-.12*
23. Operations Tempo	.22**	.06	.21**	.23**	.20**	.09	-.26**	-.04	-.32**	-.15**
24. Interrole Conflict	.01	-.06	-.13*	-.06	-.10	-.14**	.19**	.10	.19**	.17**
25. Work-Family Conflict	-.06	-.14*	-.16**	-.05	-.12*	-.19**	.28**	.18**	.24**	.24**
26. Family-Work Conflict	.10	.05	-.04	-.05	-.03	-.02	.00	-.04	.06	.01
27. Life Domain	.07	-.02	.27**	.35**	.22**	.10	-.16**	.02	-.13*	-.11*

Note. JS = Job Satisfaction; CE = Civil Engineer Career Field; AF = Air Force

* $p < .05$

** $p < .01$

Table 3 (continued)

Variable	19	20	21	22	23	24	25	26	27
1. Turnover Intentions									
2. Job Satisfaction									
3. JS- Pay									
4. JS- Promotion									
5. JS- Operating Conditions									
6. JS- Nature of Work									
7. Organizational Commitment- CE									
8. Affective Commitment- CE									
9. Normative Commitment- CE									
10. Continuance Commitment- CE									
11. Organizational Commitment- AF									
12. Affective Commitment- AF									
13. Normative Commitment- AF									
14. Continuance Commitment- AF									
15. Availability of Alternatives									
16. Ease of Movement									
17. Desirability of Movement									
18. Networking									
19. Crystallization of Alternatives									
20. Mobility	.12*								
21. Perceived Organizational Support- CE	-.28**	.04							
22. Perceived Organizational Support- AF	-.38**	-.05	.64**						
23. Operations Tempo	-.29**	-.02	.40**	.39**					
24. Interrole Conflict	.25**	-.11*	-.19**	-.21**	-.29**				
25. Work-Family Conflict	.27**	-.02	-.20**	-.22**	-.34**	.87**			
26. Family-Work Conflict	.12*	-.19**	-.09	-.12*	-.10	.77**	.35**		
27. Life Domain	-.19**	-.09	.27**	.34**	.26**	-.05	-.06	.00	

Note. JS = Job Satisfaction; CE = Civil Engineer Career Field; AF = Air Force

* $p < .05$

** $p < .01$

Interrole conflict was measured both globally and with respect to the direction of interference. When viewed in its entirety, interrole conflict was not significantly related to turnover intentions ($r = .08$, ns , $p > .05$). This was inconsistent with Hypothesis 6a. When viewed individually, work-family conflict (i.e., work conflicting with family) was positively related to turnover intentions ($r = .11$, $p < .05$). This was consistent with Hypothesis 6b. Inconsistent with Hypothesis 6c, family-work conflict (i.e., family conflicting with work) was not significantly related to turnover intentions ($r = .00$, ns , $p > .05$).

Individual Characteristics. Life domain measured the individual's degree of satisfaction with factors outside of work. Consistent with hypothesis 7, results of the study showed a negative relationship between life domain and turnover intentions ($r = -.16$, $p < .01$).

Indirect Effects

Results of the indirect effects tests are presented in Table 4. This table reports the extent to which job satisfaction and organizational commitment (to the civil engineer career field and the Air Force) mediate the relationship between turnover intentions and availability of alternatives, perceived organizational support, operations tempo, interrole conflict, and life domain. Results of the Sobel and bootstrap tests are included.

No specific hypotheses were made as to the mediating effects of job satisfaction and organizational commitment. Results of the study indicated that job satisfaction and organizational commitment to the Air Force mediated the relationship between turnover intentions and the availability of alternatives, perceived organizational support, operations tempo, interrole conflict, and life domain. Organizational commitment to the civil engineer career field mediated the relationship between turnover intentions and the availability of alternatives, perceived organizational support, and operations tempo.

Table 4

Mediating Effects of Job Satisfaction and Organizational Commitment on the Independent Variable-Turnover Intention Relationship

Mediator Variable- Independent Variable	Sobel Test				Bootstrap			
					95% C.I.			
	Value	S.E.	Z	Sig.	Mean	S.E.	Lower	Upper
<i>Job Satisfaction</i>								
Availability of Alternatives	0.1982	0.0412	4.81	.00	0.1984	0.0423	0.1200	0.2875
POS- CE	-0.1626	0.0402	-4.05	.00	-0.1633	0.0424	-0.2495	-0.0833
POS- AF	-0.2229	0.0477	-4.67	.00	-0.2224	0.0501	-0.3238	-0.1281
Operations Tempo	-0.2385	0.0434	-5.49	.00	-0.2371	0.0434	-0.3257	-0.1574
Interrole Conflict	0.1676	0.0366	4.57	.00	0.1683	0.0389	0.0975	0.2495
Life Domain	-0.2183	0.0384	-5.68	.00	-0.2182	0.0385	-0.2971	-0.1489
<i>Organizational Commitment (CE)</i>								
Availability of Alternatives	0.3330	0.0528	6.31	.00	0.3334	0.0599	0.2203	0.4569
POS- CE	-0.2870	0.0406	-7.06	.00	-0.2874	0.0441	-0.3766	-0.2049
Operations Tempo	-0.1689	0.0426	-3.96	.00	-0.1694	0.0492	-0.2694	-0.0751
Interrole Conflict	0.0092	0.0422	0.22	.83	0.0105	0.0462	-0.0806	0.1006
Life Domain	-0.0706	0.0391	-1.81	.07	-0.0700	0.0415	-0.1511	0.0085
<i>Organizational Commitment (AF)</i>								
Availability of Alternatives	0.3420	0.0633	5.41	.00	0.3422	0.0649	0.2178	0.4749
POS- AF	-0.1881	0.0393	-4.78	.00	-0.1884	0.0452	-0.2820	-0.1049
Operations Tempo	-0.1125	0.0319	-3.53	.00	-0.1135	0.0361	-0.1903	-0.0481
Interrole Conflict	0.0724	0.0315	2.30	.02	0.0739	0.0368	0.0044	0.1510
Life Domain	-0.1415	0.0323	-4.38	.00	-0.1403	0.0355	-0.2129	-0.0736

Note. POS = Perceived Organizational Support; CE = Civil Engineer Career Field; AF = Air Force

Summary

This chapter provided a summary of the results of the data analysis performed with the data that were collected. The focus of this analysis was to determine which variables were significantly related to an individual's turnover intentions. The following chapter provides a discussion of these results. Theoretical and practical implications, recommendations for senior leaders, limitations, and suggestions for future research are included.

CHAPTER 4

DISCUSSION

Summary

This study investigated the relationship between job satisfaction, organizational commitment, and several economic, organizational, and individual characteristics with respect to turnover intentions. Much of the previous military turnover research focused on the Army and was conducted during periods with a relatively low operations tempo. The primary focus of this study was to look beyond the Army, focusing on a sample of Air Force civil engineer company grade officers during a period of high operational demand.

Previous military turnover studies have consistently reported a negative relationship between job satisfaction (e.g., Chen & Ployhart, 2006; Lytell & Drasgow, 2009) and organizational commitment (e.g., Martin & O’Laughlin, 1984; Teplitsky, 1991) with respect to a service member’s turnover intentions. The results of this study confirm these findings. Job satisfaction was negatively related to turnover intentions both globally and with respect to each of the individual facets evaluated. In general, participants were satisfied with their jobs ($M = 4.33$, $SD = 0.80$). Although not hypothesized, the difference in satisfaction between one’s garrison ($M = 4.41$, $SD = 1.45$) and deployed job ($M = 5.73$, $SD = 1.23$) was of particular interest. These results were reinforced by the qualitative data collected. Many civil engineer officers referred to their deployed jobs as more meaningful and as a chance to utilize their education. Like job satisfaction, organizational commitment was negatively related to turnover intentions both globally and with respect to the three components of commitment. In general, there was a higher correlation between intent to leave and commitment to the civil engineer career field than there was between intent to leave and commitment to the Air Force. In both

situations, correlations between affective and normative commitment were higher than those for continuance commitment. This suggests that participants were more likely to remain in the organization for reasons related to emotional attachment or psychological obligation than perceived costs associated with leaving. This finding aligned with the ease of movement reported by the participants. They tended to believe they were employable elsewhere which is discussed next.

As suggested by Griffeth and his associates (2005), employees rarely quit their jobs without considering alternatives. Consistent with this idea, and the results obtained by Steel (1996), the availability of alternatives (global) was positively related to turnover intentions in this study. With respect to the five dimensions, only two of the hypotheses presented were supported. First, as expected, an individual's desirability of movement was positively related to turnover intentions. Additionally, although few participants indicated having concrete employment alternatives ($M = 2.93$, $SD = 1.45$), the crystallization of alternatives was positively related to turnover intentions. Interestingly, ease of movement was not significantly related to turnover intentions, despite quantitative ($M = 5.43$, $SD = 1.09$) and qualitative data suggesting that civil engineer officers have high perceptions as to the transferability of their skills and their marketability in the private sector.

Organizational characteristics evaluated in this study included perceived organizational support, operations tempo, and interrole conflict. The concept of perceived organizational support suggests that employees form perceptions about the extent to which the organization values their contributions and cares about their well-being (Eisenberger et al., 1986). In this study, perceived organizational support from both the civil engineer career field and the Air Force was found to be negatively related to turnover intentions and desirability of movement; it

was positively related to organizational commitment and job satisfaction. These results are consistent with Eisenberger and his associates' (1986) suggestion that the employee's interpretation about the organization's commitment toward him or her influences the employee's subsequent commitment to the organization. In sum, employees with a high degree of perceived organizational support are less inclined to seek and accept jobs with other organizations (Eisenberger et al., 1990).

Operations tempo represented the only unexpected finding in this study. Consistent with the findings of Castro et al. (1999), operations tempo was negatively related to turnover intentions. This finding is in contrast to the results of others who found a positive relationship between operations tempo and intent to leave (e.g., Adler et al., 1997, Giacalone, 2000) or that the two factors are unrelated (e.g., Reed & Segal, 2000). Quantitatively, this negative relationship was consistent using both a mean satisfaction with operations tempo ($r = -.30$, $p < .01$) and a single-item evaluation using the number of deployments ($r = -.11$, $p < .05$). The qualitative remarks provided appear to be inconsistent with this finding. Many officers cited the current operations tempo (i.e., 6 months deployed followed by 6 months home) as a primary factor in their intentions to leave. However, when considering that only 5.5% ($N = 20$) of company grade officers who responded have more than three deployments, this dissatisfaction may be more closely related to their anticipated operations tempo than their experienced operations tempo. Additionally, a positive relationship was found between both satisfaction with operations tempo and number of deployments with respect to job satisfaction ($r = .45$, $p < .01$; $r = .13$, $p < .05$, respectively). These results reinforce the previous finding that participants prefer their deployed job over their garrison job. They also suggest that deployments are beneficial to the retention of civil engineer company grade officers.

Interrole conflict represents the idea that pressure from one role is incompatible with pressure from another role (Netemeyer et al., 1996). In this study, interrole conflict was evaluated in two ways: work conflicting with family (WFC) and family conflicting with work (FWC). Results indicated that WFC was positively related to turnover intentions ($r = .11$, $p < .05$) and negatively related to job satisfaction ($r = -.30$, $p < .01$). This finding was supported by comments provided in the open-ended response section. Many officers indicated that demands from work negatively affect their ability to start or maintain family relations. Given the opportunity, it is expected that a majority of these officers will ultimately choose their family over the Air Force.

Off-the-job factors are important determinants in why individuals decide to remain with an organization (Mitchell et al., 2001). Consistent with the findings of others (e.g., Mitchell et al., 2001; Lee et al., 2004), these non-work factors (termed life domain) were negatively related to turnover intentions in this study. Additionally, life domain was found to be positively related to one's overall job satisfaction. Generally, participants expressed dissatisfaction with location, educational opportunities, and the quality of medical care provided to the member and his or her family. Of these, educational opportunities appear to be the greatest concern. Several respondents indicated that the demands of their work interfere with their ability to complete graduate education. As such, only 27.7% ($N = 101$) of those who responded held master's degrees, which have become increasingly more important for career progression and future promotions.

Theoretical and Practical Implications

Results from this study add to the existing body of knowledge focusing on the relationship between operations tempo and turnover intentions within the armed forces. At the

onset of this study, the assumption was made that the current operational environment would shape responses differently than past research conducted when operations tempo was considerably lower. Additionally, the assumption was made that previous results, being largely Army, are not generalizable to the Air Force. Neither of these assumptions was supported. This implies that the factors that influence the turnover intentions of military personnel are independent of operational pace and service branch. Also, this study used a relatively simple model to explain the employee turnover process, which incorporated the tenets of several seminal and contemporary models. Still, this model performed exceptionally well, which implies that elaborate models are not necessarily needed to explain the turnover process.

Several practical implications emerged throughout the course of this study. First, some turnover is expected as a result of the Air Force's up-or-out system and the manner in which new officers are recruited. Many officers have no intentions of remaining on active duty beyond their initial commitment owed to the government in return for their college degree. Organizational leaders should consider modifying the recruitment process to target those with more long-term career intentions. Second, perceptions of deployed work are considerably higher than those of garrison work. As suggested by Hackman and Oldham's (1976) Job Characteristics Model, leaders should consider redesigning base level jobs to enhance job characteristics (e.g., skill variety, task identity, task significance) and employee psychological states (e.g., experienced meaningfulness, responsibility for outcomes, knowledge of actual results). Third, the high relationship between perceived organizational support from the civil engineer career field and turnover intentions suggests that open lines of communication between the supervisor and subordinate are beneficial. Senior leaders should encourage mentorship and leadership involvement in the development of company grade officers, as this appears to have a strong

influence on the individual's perception of support from the organization. More specifically, junior officers appear to be concerned that organizational leaders recognize and take pride in their accomplishments, and that the organization cares about their opinions, well being, and general satisfaction at work. Finally, operations tempo does not appear to be a problem.

Officers seem to enjoy deployments, as they represent an opportunity to do more interesting and meaningful work. Leaders should make every effort to ensure that these deployments continue to meet the professional development needs of civil engineers.

Limitations and Future Research

As is the case with any research effort, this study is not without limitations. First, this study relied on self-report measures. Although self-reports are used prominently in organizational and management research, there are problems associated with their use (Podsakoff & Organ, 1986). Data typically collected using this method includes: demographic or other factual data (e.g., age, sex, tenure), descriptions of past or characteristic behavior, intentions for future behavior (e.g., to quit), scaling of psychological states of respondents (e.g., job attitudes, tension, motivation), and perceptions of external environmental variables (Podsakoff & Organ, 1986). Self-report measures of these variables are not verifiable by other means. That is to say, there is no direct means of cross-validating a person's description of their feelings or intentions. Additionally, when individuals are asked to go beyond reporting a specific fact or finite event, they are required to engage in a higher-order cognitive process that includes not only recall, but weighting, inference, prediction, interpretation, and evaluation (Podsakoff & Organ, 1986). The problem is compounded when measures of two or more of these variables are collected from the same respondent and an attempt is made to interpret correlations among them. This presents a problem called common method variance, or the idea that observed variance is attributable to the

measurement method as opposed to the measurement constructs themselves. In short, there is no way to determine if the variance observed was due to a true interaction between the measures or artificially imposed by the respondent (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003).

Second, the issue of social desirability may have affected the manner in which participants responded to some of the items on the questionnaire. Although the survey was confidential, some individuals may have had concerns that individual responses would be shared with supervisors or organizational leaders. Accordingly, when responding to items of a sensitive nature (e.g., reporting of career intentions), participants may have responded in a way they deemed to be socially desirable and acceptable. Two factors indicate that this may not have been a problem. The test of differences in proportions showed no significant difference between those who responded and those who did not. This suggests that the sample was representative of the population from which it was drawn. Additionally, this study generated a large volume of qualitative data from open-ended responses. Comments included in this section suggest that participants provided their candid feedback. For a comprehensive review of these comments, refer to Appendix D.

Third, the researchers went to great lengths to ensure the reliability and validity of the scales used. Still, some of the measures deemed important to the study were based on concepts that are relatively new (e.g., life domain, job embeddedness) or for which no universally accepted scales exist (e.g., turnover intentions, operations tempo). Accordingly, ad hoc scales were developed from other surveys (e.g., DoD Status of Forces Survey, Air Force Community Needs Assessment) to measure these variables. Although the extent to which these scales were reliable and valid was initially questioned, good reliabilities were reported for turnover intentions, operations tempo, and life domain ($\alpha = .90$, $\alpha = .77$, $\alpha = .76$, respectively). This

suggests a general consistency in these measures. Furthermore, the scales used were not developed for use in military samples. Although the questions asked were relevant to this population, it is difficult to determine the frame of reference used by the participant when responding to certain questionnaire items. For example, when answering questions such as, “I do not feel any obligation to remain with the _____” or “It would be very difficult for me to leave the _____ right now, even if I wanted to,” it was not possible to determine whether the individual’s response was based on organizational commitment or the individual’s contractual obligation to the Air Force.

Finally, when taking into consideration enlisted personnel and field grade officers, civil engineer company grade officers represent only a small subset of the Air Force civil engineering community. The extent to which the results of this study can be generalized to the rest of the civil engineer career field, the Air Force as a whole, or other military service branches is questionable. The results obtained in this study were similar to those using samples of U.S. Army personnel (e.g., Castro et al., 1999; Chen & Ployhart, 2006; Lytell & Drasgow, 2009). This provides some promise as to the generalizability of the findings.

Several research opportunities have emerged as a result of the efforts in this study, particularly within a military context. First, since names were collected, future research should include a follow-up study with those who participated in an attempt to determine which individuals have separated. This will provide the opportunity to identify the relationship between turnover intentions and actual turnover behavior. This study was conducted during a period of high operational demand. A follow-up study could also be conducted during a period of decreased operations tempo to determine if the factors that influence turnover intentions differ with a change in operational environment. Next, the questionnaire that was developed is relevant

to all military personnel, officer and enlisted. Future research should include extending the survey to enlisted personnel within the civil engineer career field and Air Force officers in other career fields. This would provide the opportunity to determine if the factors that influence turnover intentions are common among civil engineer officers and enlisted personnel, or among officers with different occupational specialties. Finally, the open-ended response section of the questionnaire generated a large volume of qualitative data from survey respondents. Future research should include interpretation of this data in search of additional insight that was not available through quantitative analysis.

Conclusion

The findings of this research identified that job satisfaction, organizational commitment, and several economic, organizational, and individual characteristics have a significant influence on an individual's turnover intentions. Perhaps the most significant finding is that operations tempo does not appear to be of primary concern in the retention of civil engineer company grade officers, even in today's high-demand operational environment. Instead, an individual's intent to leave the organization appears to be more closely related to satisfaction with their in garrison jobs. As such, this is where organizational leaders should focus their efforts when making decisions that affect the long-term health of the civil engineer company grade officer corps.

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Appendix A: Air Force Civil Engineer Officer Attitudes Questionnaire

PART I

Job Attitudes

We would like to understand how you feel about different aspects of your job. For each statement, please fill in the circle for the number that indicates the extent to which you believe the statement is true. Use the scale below for your responses.

①	②	③	④	⑤	⑥	⑦		
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree		
1.	I feel I am being paid a fair amount for the work I do.	①	②	③	④	⑤	⑥	⑦
2.	There is really too little chance for promotion on my job.	①	②	③	④	⑤	⑥	⑦
3.	Many of our rules and procedures make doing a good job difficult.	①	②	③	④	⑤	⑥	⑦
4.	Raises are too few and far between.	①	②	③	④	⑤	⑥	⑦
5.	Those who do well on the job stand a fair chance of being promoted.	①	②	③	④	⑤	⑥	⑦
6.	My efforts to do a good job are seldom blocked by red tape.	①	②	③	④	⑤	⑥	⑦
7.	I feel unappreciated by the Air Force when I think about what they pay me.	①	②	③	④	⑤	⑥	⑦
8.	People get ahead as fast here as they do in other places (i.e., private sector).	①	②	③	④	⑤	⑥	⑦
9.	I have too much to do at work.	①	②	③	④	⑤	⑥	⑦
10.	I feel satisfied with my chances for salary increases.	①	②	③	④	⑤	⑥	⑦
11.	I am satisfied with my chances for promotion.	①	②	③	④	⑤	⑥	⑦
12.	I have too much paperwork.	①	②	③	④	⑤	⑥	⑦
13.	All things considered (i.e., pay, promotion, operating conditions, nature of work), I feel satisfied with my present job.	①	②	③	④	⑤	⑥	⑦
14.	The demands of my work interfere with my home and family life.	①	②	③	④	⑤	⑥	⑦
15.	The demands of my family or spouse/significant other interfere with work-related activities.	①	②	③	④	⑤	⑥	⑦
16.	The amount of time my duties take up makes it difficult to fulfill family responsibilities.	①	②	③	④	⑤	⑥	⑦
17.	I have to put off doing things at work because of demands on my time at home.	①	②	③	④	⑤	⑥	⑦

①	②	③	④	⑤	⑥	⑦				
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree				
18.	Things I want to do at home do not get done because of the demands my job puts on me.			①	②	③	④	⑤	⑥	⑦
19.	Things I want to do at work don't get dome because of the demands of my family or spouse/partner.			①	②	③	④	⑤	⑥	⑦
20.	My job produces strain that makes it difficult to fulfill family duties.			①	②	③	④	⑤	⑥	⑦
21.	My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks, and working overtime.			①	②	③	④	⑤	⑥	⑦
22.	Due to work-related duties, I have to make changes to my plans for family activities.			①	②	③	④	⑤	⑥	⑦
23.	Family-related strain interferes with my ability to perform job-related duties.			①	②	③	④	⑤	⑥	⑦

We would like to understand how you feel about the nature of the work you do. For each statement, please indicate how you feel with respect to your day to day job at your normal duty station, your deployed job, and jobs you may hold in the future as a more senior CE officer (e.g., operations flight commander, squadron commander). For each statement, please fill in the circle for the number that indicates the extent to which you believe the statement is true. Use the scale below for your responses. If you have not deployed, leave that section blank.

①	②	③	④	⑤	⑥	⑦
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree
	In garrison job		My deployed job (if applicable)		My future duties as a senior CE officer	
1. I sometimes feel my job is meaningless.	① ② ③ ④ ⑤ ⑥ ⑦		① ② ③ ④ ⑤ ⑥ ⑦		① ② ③ ④ ⑤ ⑥ ⑦	
2. I like doing the things I do at work.	① ② ③ ④ ⑤ ⑥ ⑦		① ② ③ ④ ⑤ ⑥ ⑦		① ② ③ ④ ⑤ ⑥ ⑦	
3. I feel a sense of pride in doing my job.	① ② ③ ④ ⑤ ⑥ ⑦		① ② ③ ④ ⑤ ⑥ ⑦		① ② ③ ④ ⑤ ⑥ ⑦	
4. My job is enjoyable.	① ② ③ ④ ⑤ ⑥ ⑦		① ② ③ ④ ⑤ ⑥ ⑦		① ② ③ ④ ⑤ ⑥ ⑦	

PART II

General Attitudes toward CE and the Air Force

We would like to understand how you feel about the Civil Engineer career field and the Air Force. For each statement, please fill in the circle for the number that indicates the extent to which you believe the statement is true. For each statement, please provide a response for both CE Career Field and Air Force. Use the scale below for your responses.

	① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree or Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree
	CE Career Field				Air Force		
1. I would be very happy to spend the rest of my career in the _____.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		
2. I do not feel any obligation to remain with the _____.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		
3. I am not afraid of what might happen if I quit the _____ without having another job lined up.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		
4. I enjoy discussing the _____ with people outside it.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		
5. Even if it were to my advantage, I do not feel it would be right to leave the _____ now.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		
6. It would be very difficult for me to leave the _____ right now, even if I wanted to.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		
7. I really feel as if the _____ problems are my own.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		
8. I would feel guilty if I left the _____ now.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		
9. Too much of my life would be disrupted if I decided I wanted to leave the _____ right now.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		
10. I think I could easily become attached to another organization as I am to the _____.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		
11. The _____ deserves my loyalty.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		
12. It wouldn't be too costly for me to leave the _____ in the near future.	① ② ③ ④ ⑤ ⑥ ⑦				① ② ③ ④ ⑤ ⑥ ⑦		

		①	②	③	④	⑤	⑥	⑦
		Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree
		CE Career Field					Air Force	
13.	I do not feel like part of the family ” in the _____.	①	②	③	④	⑤	⑥	⑦
14.	I would not leave the _____ right now because I have a sense of obligation to the people in it.	①	②	③	④	⑤	⑥	⑦
15.	Right now, staying with the _____ is a matter of necessity as much as a desire.	①	②	③	④	⑤	⑥	⑦
16.	I do not feel emotionally attached ” to the _____.	①	②	③	④	⑤	⑥	⑦
17.	I owe a great deal to the _____.	①	②	③	④	⑤	⑥	⑦
18.	I believe I have too few options to consider leaving the _____.	①	②	③	④	⑤	⑥	⑦
19.	The _____ has a great deal of personal meaning to me.	①	②	③	④	⑤	⑥	⑦
20.	One of the few negative consequences of leaving the _____ would be scarcity of available alternatives.	①	②	③	④	⑤	⑥	⑦
21.	I do not feel a strong sense of belonging to the _____.	①	②	③	④	⑤	⑥	⑦
22.	One of the major reasons I continue to work for the _____ is that leaving would require considerable personal sacrifice; another organization may not match the overall benefits I have here.	①	②	③	④	⑤	⑥	⑦
23.	If I had not already put so much of myself into the _____, I might consider working elsewhere.	①	②	③	④	⑤	⑥	⑦
24.	The _____ strongly considers my goals and values.	①	②	③	④	⑤	⑥	⑦
25.	The _____ disregards my best interests when it makes decisions that affect me.	①	②	③	④	⑤	⑥	⑦
26.	Help is available from the _____ when I have a problem.	①	②	③	④	⑤	⑥	⑦
27.	The _____ really cares about my well-being.	①	②	③	④	⑤	⑥	⑦
28.	Even if I did the best job possible, the _____ would fail to notice.	①	②	③	④	⑤	⑥	⑦

①	②	③	④	⑤	⑥	⑦			
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree			
			CE Career Field		Air Force				
29.	The _____ cares about my general satisfaction at work.		①	②	③	④	⑤	⑥	⑦
30.	The _____ shows little concern for me.		①	②	③	④	⑤	⑥	⑦
31.	The _____ cares about my opinions.		①	②	③	④	⑤	⑥	⑦
32.	The _____ takes pride in my accomplishments at work.		①	②	③	④	⑤	⑥	⑦

PART III

Operations Tempo

We would like to understand the operations tempo you have experienced and how you feel about it. If you travelled from your normal duty station on deployment orders, consider your mission a deployment even if you did not leave CONUS. Otherwise, consider your mission a TDY. For the following items, respond to the best of your knowledge by WRITING IN THE INFORMATION requested.

1. Since entering the Air Force, how many deployments have you been on? (Include the current deployment if you are currently deployed)
_____ deployment(s)
2. Since entering the Air Force, how much time have you spent deployed (report the total considering all deployments and include the time currently if you are deployed as you complete this)?
_____ month(s) _____ day(s)
3. Since entering the Air Force, how many Joint Expeditionary Tasking deployments (previously known as In-Lieu-Of or ILO deployments) have you been on? (Include current deployment if you are currently fulfilling a Joint Expeditionary Tasking).
_____ Joint Expeditionary Tasking deployment(s)
4. Over the previous 12 months, how many days have you spent away from your duty station? (i.e., TDY – not to include days deployed)
_____ day(s)

5. Over the previous 12 months, how many training exercises have you participated in? (i.e., Silver Flag, Eagle Flag, etc.)
_____ exercises(s)
6. In the past 12 months, how many times have you had to work longer than your normal duty day? (Consider a normal duty day to be 0730-1630, Monday through Friday).
_____ time(s)

For the following items, indicate the extent to which you are satisfied with the statement. Use the scale below for your responses.

	① Very Dissatisfied	② Dissatisfied	③ Somewhat Dissatisfied	④ Neither Satisfied or Dissatisfied	⑤ Somewhat Satisfied	⑥ Satisfied	⑦ Very Satisfied
7. How satisfied are you with the number of deployments time you have been deployed?	①	②	③	④	⑤	⑥	⑦
8. How satisfied are you with the length (days deployed) of those deployments?	①	②	③	④	⑤	⑥	⑦
9. How satisfied are you with the frequency of deployments (i.e., dwell ratio)?	①	②	③	④	⑤	⑥	⑦
10. Overall, how satisfied are you with your deployment experience (i.e., number, length, and frequency)?	①	②	③	④	⑤	⑥	⑦
11. Over the previous 12 months, how satisfied are you with the number of days that you have spent away from your duty station (i.e., TDY – not to include days deployed)?	①	②	③	④	⑤	⑥	⑦
12. Over the previous 12 months, how satisfied are you with the number of training exercises that you have participated in (i.e., Silver Flag, Eagle Flag, etc.)?	①	②	③	④	⑤	⑥	⑦
13. Over the previous 12 months, how satisfied are you with the number of times that you have had to work longer than your normal duty day?	①	②	③	④	⑤	⑥	⑦
14. Overall, how satisfied are you with your perceived level of operations tempo (i.e., number of deployments, number of days TDY over the last 12 months, number of training exercises over the last 12 months, number of times you have had to work longer than your normal duty day)?	①	②	③	④	⑤	⑥	⑦

PART IV

Career Opportunities & Intentions

We would like to understand your career intentions and how you feel about the civilian labor market. 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	②	③	④	⑤	⑥	⑦				
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree				
1.	If I were to enter the civilian job market, I would receive many job offers from many organizations.			①	②	③	④	⑤	⑥	⑦
2.	It would be easy for me to get a job in a location where I'd prefer to work.			①	②	③	④	⑤	⑥	⑦
3.	There really aren't very many jobs for people like me in today's job market.			①	②	③	④	⑤	⑥	⑦
4.	Given my qualifications and experience, getting a new job would not be very hard at all.			①	②	③	④	⑤	⑥	⑦
5.	I can think of a number of organizations that would probably offer me a job if I was looking.			①	②	③	④	⑤	⑥	⑦
6.	If I looked for a job, I would probably wind up with a <i>better</i> job than the one I have now.			①	②	③	④	⑤	⑥	⑦
7.	By and large, the jobs I could get if I left here are <i>superior</i> to the job I have now.			①	②	③	④	⑤	⑥	⑦
8.	Most of the jobs I could get would be an <i>improvement</i> over my present circumstances.			①	②	③	④	⑤	⑥	⑦
9.	I have a far-reaching network " of contacts which could help me find out about other job opportunities.			①	②	③	④	⑤	⑥	⑦
10.	I have contacts in other companies who might help me line up a new job.			①	②	③	④	⑤	⑥	⑦
11.	My work and/or social activities tend to bring me in contact with a number of people who might help me line up a new job.			①	②	③	④	⑤	⑥	⑦
12.	Right now, I have a job offer — on the table" from another company, if I choose to take it.			①	②	③	④	⑤	⑥	⑦
13.	I have found a better alternative than my job.			①	②	③	④	⑤	⑥	⑦
14.	I am unable to move to another place of residence now even if a better job came along.			①	②	③	④	⑤	⑥	⑦

①	②	③	④	⑤	⑥	⑦				
Strongly Disagree	Disagree	Slightly Disagree	Neither Agree or Disagree	Slightly Agree	Agree	Strongly Agree				
15. There are too many factors in my personal life (e.g., school age children, relatives, etc.) which make it very difficult for me to leave in the near future.				①	②	③	④	⑤	⑥	⑦

CHECK THE BOX ☒ that best describes you.

16. Compared to other career fields, what do you feel is the current demand for your occupation in civilian employment?

- ☐ **Very High**
☐ **High**
☐ **Neither High or Low**
☐ **Low**
☐ **Very Low**

17. Suppose that you are offered an opportunity for civilian employment. Assuming that you could separate from the Air Force, how likely is it that you would choose to do so?

- ☐ **Very Likely**
☐ **Likely**
☐ **Neither Likely or Unlikely**
☐ **Unlikely**
☐ **Very Unlikely**

We would like to understand your career intentions—your individual responses will not be shared with others. Please fill in the circle for the number that best indicates your intentions.

① Strongly Disagree	② Disagree	③ Slightly Disagree	④ Neither Agree or Disagree	⑤ Slightly Agree	⑥ Agree	⑦ Strongly Agree				
18. I have thought about separating.				①	②	③	④	⑤	⑥	⑦
19. I am thinking of leaving the Air Force when my service commitment is up.				①	②	③	④	⑤	⑥	⑦
20. I am thinking of leaving the CE career field.				①	②	③	④	⑤	⑥	⑦
21. I am planning to look for a new job outside of the Air as soon as get within a year of my service commitment.				①	②	③	④	⑤	⑥	⑦
22. I am planning to look for a new job outside of the CE career field within the next year.				①	②	③	④	⑤	⑥	⑦

23. I expect to work within the Air Force beyond my current service commitment.	① ② ③ ④ ⑤ ⑥ ⑦
24. I expect to work within the CE career field beyond my current commitment.	① ② ③ ④ ⑤ ⑥ ⑦

For the following items, respond by CHECKING THE BOX ☒ that best describes you.

25. Suppose that you have to decide whether to stay on active duty. Assuming that you could stay, how likely is it that you would choose to do so?

- ☐ **Very Likely**
- ☐ **Likely**
- ☐ **Neither Likely or Unlikely**
- ☐ **Unlikely**
- ☐ **Very Unlikely**

26. Which best describes your current active duty Air Force career intentions?

- ☐ **Definitely stay in until retirement**
- ☐ **Probably stay in until retirement**
- ☐ **Definitely stay in beyond present obligation, but not until retirement**
- ☐ **Undecided**
- ☐ **Probably leave upon completion of current obligation**
- ☐ **Definitely leave upon completion of current obligation**

PART V

Demographics

This final 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. What is your gender?

- ☐ **Male**
- ☐ **Female**

2. What is your age? _____ years

3. What is your rank?
- ☐ **Second Lieutenant (O-1)**
 - ☐ **First Lieutenant (O-2)**
 - ☐ **Captain (O-3)**
4. How long have you served on Active Duty Air Force?
_____ year(s) _____ month(s)
5. How long have you served Active Duty Air Force within the Civil Engineer Officer career field (AFSC – 32EX)?
_____ year(s) _____ month(s)
6. What is your current marital status?
- ☐ **Single (never married)**
 - ☐ **Married**
 - ☐ **Legally separated**
 - ☐ **Divorced**
 - ☐ **Widowed**
7. Is your spouse currently employed?
- ☐ **No**
 - ☐ **Yes**
 - ☐ **Does not apply**
8. Do you have children?
- ☐ **No**
 - ☐ **Yes** **If yes, how many?** _____
9. What is the highest level of education that you have completed?
- ☐ **Bachelor's Degree** **How many?** _____
 - ☐ **Master's Degree** **How many?** _____
 - ☐ **Doctorate Degree** **How many?** _____
 - ☐ **Other (please specify)** _____
10. Have you passed the Fundamentals of Engineering (FE) exam?
- ☐ **No**
 - ☐ **Yes**
 - ☐ **Have not taken the exam**
 - ☐ **Does not apply (not related to my specialty)**

11. Have you passed the Professional Engineers (PE) exam?

- ☐ **No**
☐ **Yes**
☐ **Have not taken the exam**
☐ **Does not apply (not related to my specialty)**

We would like to understand how you feel about different aspects of Air Force life. For each statement, please fill in the circle for the number that indicates the extent to which you are satisfied with the statement. Use the scale below for your responses.

① N/A	① Very Dissatisfied	② Dissatisfied	③ Somewhat Dissatisfied	④ Neither Satisfied or Dissatisfied	⑤ Somewhat Satisfied	⑥ Satisfied	⑦ Very Satisfied					
1.	My place of current residence (i.e., house, apartment, condominium).				①	①	②	③	④	⑤	⑥	⑦
2.	My home, leave, and vacation opportunities.				①	①	②	③	④	⑤	⑥	⑦
3.	The entertainment/recreation/club facilities that is available.				①	①	②	③	④	⑤	⑥	⑦
4.	My personal safety.				①	①	②	③	④	⑤	⑥	⑦
5.	The schools my children attend.				①	①	②	③	④	⑤	⑥	⑦
6.	Child care arrangements/facilities.				①	①	②	③	④	⑤	⑥	⑦
7.	The quality of education my children receive.				①	①	②	③	④	⑤	⑥	⑦
8.	The medical/dental services that is available.				①	①	②	③	④	⑤	⑥	⑦

Thank you for your participation!

Please include any comments you have

<i>Measure</i>	<i>Description</i>	<i>Instrument</i>	<i>Source of Measure</i>	<i>Example Item</i>
<i>Turnover Intentions</i>	Future intentions to stay with the organization			“I am thinking of leaving the Air Force”
<i>Job Satisfaction</i>	The extent to which people like or dislike their jobs	Job Satisfaction Survey	Spector, 1997	
Pay	Satisfaction with pay and raises			“I feel I am being paid a fair amount for the work I do”
Promotion	Satisfaction with promotion opportunities			“I am satisfied with my chances for promotion
Operating Conditions	Satisfaction with rules and procedures			“I have too much to do at work”
Nature of Work	Satisfaction with the type of work done			“My job is enjoyable”
<i>Organizational Commitment</i>	Employee commitment to the organization	Meyer and Allen Three-Component Model	Meyer and Allen, 1997	
Affective Commitment	Emotional attachment to, identification with, and involvement in the organization			“I would be very happy to spend the rest of my career in this organization”
Normative Commitment	Feelings of obligation to stay with the organization			“I do not feel any obligation to remain with my current employer”
Continuance Commitment	Commitment based on the costs that the employee associates with leaving the organization			“I am not afraid of what might happen if I quit my job without having another one lined up”

<i>Measure</i>	<i>Description</i>	<i>Instrument</i>	<i>Source of Measure</i>	<i>Example Item</i>
<i>Availability of Alternatives</i>	An individual's desire and perception of job alternatives	Employment Opportunity Index	Griffeth et al., 2005	
Ease of Movement	Quantity, quality, and accessibility of job alternatives			–There really aren't very many jobs for people like me in today's job market"
Desirability of Movement	Desire for a new job			–If I looked for a job, I would probably wind up with a better job than the one I have now"
Networking	Access to job availability information			–I have contacts in other companies who might help me line up a new job"
Crystallization of Alternatives	Concreteness of employment alternatives			–I have found a better alternative than my job"
Mobility	Outside influences that may affect ability to leave your current job			–I am unable to move to another place of residence now even if a better job came along"
<i>Perceived Organizational Support</i>	Perception of support from the organization	Survey of Perceived Organizational Support	Eisenberger et al., 1986	–The organization takes pride in my accomplishments at work"
<i>Operations Tempo</i>	Rate of operations measured by deployments, training exercises, TDY assignments, and work hours			–How satisfied are you with the number of deployments you have been assigned"
<i>Interrole Conflict</i>	Pressure from one role is not compatible with pressure from another role	Work-Family/Family-Work Conflict Scales	Netemeyer et al., 1996	
Work-Family Conflict	Demands of, time devoted to, and strain created by the job interfere with family-related responsibilities			–The demands of my work interfere with my home and family life"
Family-Work Conflict	Demands of, time devoted to, and strain created by the family interfere with work-related responsibilities			–The demands of my family or spouse/partner interfere with work-related activities"
<i>Life Domain</i>	Satisfaction with variables outside of the job			–How satisfied are you with your current place of residence"

Measure	Construct Validity		Content Validity	Predictive Validity	Reliability
	Convergent	Discriminant			
Turnover Intentions					
Job Satisfaction	.61 - .80 Correlates with JDI (van Saane et al., 2003)	.19 - .59 (van Saane et al., 2003)	Contains 9 of 11 work factors (van Saane et al., 2003)	Predicts turnover (Kinicki et al., 2002)	Internal consistency : $\alpha = .91$ Test-Retest: $\alpha = .71$ (van Saane et al., 2003)
Pay					$\alpha = .75$ (Spector, 1997)
Promotion					$\alpha = .73$ (Spector, 1997)
Operating Conditions					$\alpha = .62$ (Spector, 1997)
Nature of Work					$\alpha = .78$ (Spector, 1997)
Organizational Commitment				All 3 components related to turnover intentions concurrently and longitudinally (Jaros, 1997)	
Affective Commitment	Related to variables such as voice and loyalty (Meyer et al., 1993)	Not related to voluntary absence (Meyer et al., 1993)			$\alpha = .82$ (organization) $\alpha = .82$ (occupation) (Meyer et al., 1993)
Normative Commitment	Related to variables such as age and tenure (Meyer et al., 1993)	Not related to job satisfaction (Meyer et al., 2003)			$\alpha = .83$ (organization) $\alpha = .80$ (occupation) (Meyer et al., 1993)
Continuance Commitment	Related to variables such as voice and loyalty (Meyer et al., 1993)	Not related to voluntary absence (Meyer et al., 1993)			$\alpha = .83$ (organization) $\alpha = .80$ (occupation) (Meyer et al., 1993)

<i>Measure</i>	<i>Construct Validity</i>		<i>Content Validity</i>	<i>Predictive Validity</i>	<i>Reliability</i>
	<i>Convergent</i>	<i>Discriminant</i>			
<i>Availability of Alternatives</i>	Related to variables such as intent to search, intent to quit, and actual turnover (Griffeth et al., 2005)	Not related to variables such as job satisfaction, autonomy, and job security (Griffeth et al., 2005)		Adds predictive power to the turnover process (Griffeth et al., 2005)	
Ease of Movement					3 samples $\alpha = .90/.76/.70$ (Griffeth et al., 2005)
Desirability of Movement					3 samples $\alpha = .78/.84/.85$ (Griffeth et al., 2005)
Networking					3 samples $\alpha = .63/.75/.76$ (Griffeth et al., 2005)
Crystallization of Alternatives					3 samples $\alpha = .59/.77/.82$ (Griffeth et al., 2005)
Mobility					3 samples $\alpha = .67/.66/.73$ (Griffeth et al., 2005)
<i>Perceived Organizational Support</i>	Correlated with Organizational Commitment Questionnaire (OCQ) and Affective Commitment Scale (ACS) (Shore & Tetrick, 1991)	Not related to Continuance Commitment Scale (Shore & Tetrick, 1991)		Predicts absenteeism (Eisenberger et al., 1986)	$\alpha = .97$ (Eisenberger et al., 1986)
<i>Operations Tempo</i>					
<i>Interrole Conflict</i>	Related to variables such as job tension, role conflict, and intent to leave organization (Netemeyer et al., 1996)	Not related to variables such as life satisfaction and relationship satisfaction (Netemeyer et al., 1996)		Predicts intent to leave and intent to search for another job (Netemeyer et al., 1996)	
Work-Family Conflict		Distinct from Family-Work Conflict (Netemeyer et al., 1996)			$\alpha = .88$ (Netemeyer et al., 1996)
Family-Work Conflict		Distinct from Work-Family Conflict (Netemeyer et al., 1996)			$\alpha = .88$ (Netemeyer et al., 1996)
<i>Life Domain</i>					

Appendix C: Approved IRB Package



DEPARTMENT OF THE AIR FORCE AIR UNIVERSITY (AETC)

27 August 2009

MEMORANDUM FOR 711 HPW/IR (AFRL IRB)

FROM: AFIT/ENV
2950 Hobson Way
Wright-Patterson AFB OH 45433-7765

SUBJECT: An Analysis of Factors That Influence Air Force Civil Engineer Company Grade
Officer Turnover Intentions

1. The undersigned have reviewed the proposed research and affirm that it meets all requirements for ethical human experimentation as set forth in current Federal, DoD, Air Force, and AFRL guidance.
2. Specifically, we confirm that the proposed research meets the following criteria:
 - a. The investigators are fully qualified to carry out the proposed research and understand the duties required by AFRLI 40-402.
 - b. The proposal has undergone adequate peer review to ensure its scientific quality.
 - c. The research is relevant to valid Air Force needs.
 - d. The required information can only be obtained by use of human subjects.
 - e. The experimental/statistical design is adequate to resolve the hypothesis or answer the research question.
3. The personnel and resources required to implement the proposed research are currently available to the proposing organization. It is the Department of Systems and Engineering Management's intent to carry out this research as approved.
4. For questions or concerns, please contact Lt Col Daniel T. Holt, AFIT/ENV at (937) 255-3636 ext. 7396 or daniel.holt@afit.edu.

A handwritten signature in blue ink, reading "Daniel T. Holt", is positioned above the printed name and title.

DANIEL T. HOLT, Lt Col, USAF, PhD
Assistant Professor of Management
Principal Investigator

27 August 2009

1st IND, AFIT/ENV (Department Head)

I concur that the proposed research meets all requirements for ethical and human experimentation as set forth in current Federal, DoD, Air Force, and AFRL guidance. It is the Department of Systems and Engineering Management's intent to carry out this research as approved.

A handwritten signature in black ink, appearing to read 'AdeDeji B. Badiru', written over a horizontal line.

ADEDEJI B. BADIRU
Department Head and Professor
Department of Systems and Engineering Mgmt



DEPARTMENT OF THE AIR FORCE
AIR FORCE MATERIEL COMMAND
WRIGHT-PATTERSON AIR FORCE BASE OHIO

24 Aug 2009

MEMORANDUM FOR AFRL IRB

FROM: AFIT/ENV

SUBJECT: Principal Investigator Cover Letter for An Analysis of Factors That Influence Air Force Civil Engineer Company Grade Officer Turnover Intentions

1. Request IRB review and approval of the protocol named above which should be considered as a freestanding protocol.
2. As principal investigator, the undersigned affirms that the protocol complies with the requirements for human experimentation set forth in Federal code and the DoD, Air Force, and AFRL instructions implementing it. In addition, the undersigned agrees to:
 - a) Ensure that all human research conducted under this protocol will conform to the written, approved document, including any restrictions imposed during the approval process.
 - b) Read and abide by the assurance of compliance with the federal policy for the protection of human subjects [e.g., a DoD Single Project Assurance, AFRL's Multiple Project Assurance (MPA #50002) or a Federal Wide Assurance] provided by the undersigned's institution to cover activities conducted under this protocol.
 - c) Monitor the progress of this research and notify the IRB in writing within 24 hours of any unexpected event or medical misadventure.
 - d) Notify the IRB, in a timely manner, if either the risk or the benefit of the research appears substantially different from those represented in the protocol, or if early results clearly resolve the hypothesis.
 - e) Notify the IRB in writing of any conflict of interest (financial or otherwise) within the research team that exists or arises during the project.
 - f) Provide progress and final reports for research as required by the IRB as well as notifying the IRB of any publications resulting from this protocol.
 - g) Ensure that copies of the electronically signed Informed Consent Document for all subjects are filed as required by AFRLI 40-402 and that all records of completed research are provided to the IRB administrator for permanent archiving.

DANIEL T. HOLT, Lt Col, USAF, PhD
Assistant Professor of Management
Principal Investigator

**AN ANALYSIS OF FACTORS THAT INFLUENCE AIR FORCE CIVIL ENGINEER
COMPANY GRADE OFFICER TURNOVER INTENTIONS**
F-WR-2010-0013-H

1. Principal Investigator

DANIEL T. HOLT, Lt Col, USAF, PhD, Assistant Professor of Management,
AFIT/ENV, (937) 255-3636 ext. 7396, daniel.holt@afit.edu

2. Associate Investigators

- a. KEVIN C. RIDDEL, Capt, USAF, AFIT Master's Degree Student, AFIT/ENV, (937)
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3. Medical Consultant

Michael Richards, Lt Col, USAF, MC, SFS, (937) 904-8100,
michael.richards@wpafb.af.mil

4. Facility/Contractor

The project will not require any special facility or involvement of any contractors.

5. Objective

The purpose of this research is to test the relationship between several attitudinal measures, operations tempo, and turnover intentions of Air Force civil engineer company grade officers in the current operational environment. Specific attitudes include: job satisfaction, availability of job alternatives, interrole conflict, perceived organizational support, organizational commitment, and quality of life.

6. Background

Voluntary turnover is of concern to organizations from a financial and a performance standpoint. When individuals leave the organization, new candidates must be recruited, selected, trained, and acclimated to the organization's culture (Holt, Rehg, Lin, & Miller, 2007). Voluntary turnover that occurs early in an employee's tenure is particularly detrimental to performance as investments made in recruitment, training, and socialization do not provide immediate returns. Each of these steps has a cost associated with it where these costs have been estimated to range from a few thousand dollars to more than double the employee's annual salary (Holtom, Mitchell, Lee, & Eberly, 2008). In the Air Force, Holt et al. (2007) mention that the costs associated with initial screening and basic skills training for Air Force officers exceeds \$300 million annually and increase significantly when specialized training is taken into consideration.

Because of these costs in terms of money, time, and performance, public and private organizations make every attempt to retain quality employees (Holt et al., 2007). Moreover, researchers have been working to better understand this practical issue with more than 1,500 turnover related publications in the past 50 years (Holtom et al., 2008). Of these studies, several have focused on the military. Much of this research looking at military members has investigated the effects of operations tempo on turnover decisions (Huffman, Adler, Dolan, & Castro, 2005; Hosek & Totten, 1998; Hosek, Kavanagh, &

Miller, 2006; Fricker, 2002). The results of these studies have yielded inconsistent results as to the extent of the relationship. Furthermore, many of the studies performed to date have relied on data collected in the mid to late 1990's (Wisecarver, Cracraft, & Heffner, 2006; Hosek, 2004; Reed & Segal, 2000; Hosek & Totten, 1998), and are not representative of the operational environment the military is currently facing.

It is important to understand if the increased operations tempo Air Force civil engineer company grade officers are currently experiencing results in a level of dissatisfaction that ultimately decreases retention. The extent to which this has detrimental effects has been hypothesized, but has not yet been tested.

7. Impact

Results of this research will provide Air Force civil engineer senior leadership with a better understanding of the factors that are influencing civil engineer company grade officers decisions to remain or separate from the service. This information could then be used by commanders to mentor young officers as they make decisions to leave the service.

8. Experimental Plan

a. Equipment:

The project requires no special equipment.

b. Subjects:

Approximately 800 current Air Force civil engineer company grade officers (male and female) will be invited to participate in this study. Air Force civil engineer company grade officers hold the rank of second lieutenant to captain and are low to mid-level managers within the organization who are responsible for the design, construction, and maintenance of facilities and infrastructure at Air Force installations around the world. They typically have been in the service for one to nine years, and will be between 22 and 44 years old. Some officers will have been recently commissioned through ROTC or Officer Training School and could be as young as 22, where others who were commissioned just prior to their 35th birthday could be as old as 44. Total service time, however, will vary slightly depending on whether or not the member had military service prior to becoming an officer.

c. Duration:

The project will run from December 09 – March 10.

d. Description of experiment, data collection, and analysis:

Data will be collected using a web-based questionnaire. Consistent with research that has indicated that advance notifications increase response rates (Medlin, Roy, & Ham Chai, 1999; Solomon, 2001), a message will be sent a few days prior to the distribution of the

questionnaire that notifies potential participants that they will soon be receiving the questionnaire. This advance notification will come from the Air Force Civil Engineer (AFCE) and will address his concerns without taking potential participants to the survey link. A few days after the pre-notification, participants will be invited to participate through an e-mail that will be sent directly to their e-mail accounts. This e-mail will come from the principal investigator on the investigation team and will state the voluntary nature of the questionnaire, the purpose of the questionnaire, and the intended use of the information provided. The invitation letter will be followed by two e-mail reminders from the principal investigator that will be sent out approximately one week apart.

The questionnaire will include 118 items measuring: job satisfaction, availability of alternatives, interrole conflict, perceived organizational support, organizational commitment, life domain, operations tempo, and turnover intentions. The questionnaire also contains a demographics section and an open-ended response section. In the demographics section, participants will be asked to provide gender, age, rank, active duty service time, commissioned service time as an Air Force officer, marital status, spousal employment, number of children, education level, and professional licensure. The open-ended response section allows participants to openly express attitudes or opinions that are unable to be captured through items in the questionnaire. The questionnaire will require a 30 to 45 minute time commitment from each participant. No additional compensation will be provided for participants. Active duty military will receive normal active duty pay.

Data collected will be analyzed using the Statistical Package for the Social Sciences. Direct effects (e.g., effect of job satisfaction on turnover intentions) will be analyzed using a bivariate correlation. Indirect effects (e.g., job satisfaction mediating relationship between availability of alternatives and turnover intentions) will be analyzed using a Sobel Test and mediated regression. Other relationships (e.g., rank and turnover intentions) that cannot be analyzed using correlation or regression will be analyzed using the method most appropriate for the type of data (e.g., t-test, analysis of variance).

The survey will be confidential. To measure certain demographic variables objectively and accurately (such that they aren't influenced by recall errors), years of service and number of days TDY and deployed, for instance, will be collected through a review of service records. Accordingly, participants are asked to provide their name. Other deployment data to be obtained through these records includes date, location, and duration of individual deployments. Electronic access to service records will be provided by the Civil Engineer Officer functional at Air Force Personnel Center (AFPC). At no time, however, will this AFPC representative see the participants' survey responses. Therefore, records will only be reviewed by members of the investigative team for this study and all necessary measures will be taken to ensure that confidentiality is maintained.

e. Safety monitoring:

The project requires no special safety monitoring.

f. Confidentiality protection:

While participants will not be presented with any physical risk, the participants' names will be collected which is considered sensitive. These data will be kept strictly confidential and will only be seen by the investigators. Electronic data containing personal information will be stored in a password protected file on a secure server. Hardcopy data will be stored in a locked cabinet in an office that is locked when not occupied (the key is held by the Principal Investigator, Lt Col Daniel Holt). At no time will information be reported to any organization in a way that any particular participant or organization can be identified. When no longer needed for research purposes information will be destroyed in a secure manner.

9. Risk Analysis

The project should pose no medical risks to participants. Participants will be asked to provide personally identifiable information, which might be considered sensitive. In order to protect this information, the data will directly to the research team, password protected on an Air Force Institute of Technology secure server so that it cannot be accessed by others, and confidentiality of participants is maintained.

10. References

- a. Fricker, R. D. (2002). *The effects of perstempo on officer retention in the U.S. military*. Santa Monica, CA: Rand Corporation.
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11. Attachments

- a. Informed Consent Document
- b. Curriculum vitae of investigators
- c. Questionnaires or surveys (candidate questionnaire is attached)
- d. Subject recruiting materials (candidate invitation is attached)
- e. Pre-notification from Air Force Civil Engineer

INFORMATION PROTECTED BY THE PRIVACY ACT OF 1974

**Informed Consent Document
For
An Analysis of Factors That Influence Air Force Civil Engineer Company Grade Officer
Turnover Intentions**

AFIT/ENV, Air Force Institute of Technology, Wright Patterson AFB, OH

Principal Investigator: Lt Col Daniel T. Holt, DSN 785-3636 ext. 7396, AFIT/ENV
daniel.holt@afit.edu

Associate Investigator: Capt Kevin C. Riddel, DSN 785-3636 ext. 7396, AFIT/ENV
kevin.riddel@afit.edu

1. **Nature and purpose:** You have been offered the opportunity to participate in the “Analysis of Factors That Influence Air Force Civil Engineer Company Grade Officer Turnover Intentions” research study. Your participation will occur sometime between 01 Dec 2009 and 01 Mar 2010 at your normal duty station.

The purpose of this research is to evaluate the factors that influence Air Force civil engineer company grade officer turnover intentions. More specifically, the relationship between operations tempo and turnover intentions of these officers will be tested.

The time requirement for each volunteer subject is anticipated to be a total of approximately 30 to 45 minutes each. A total of approximately 800 subjects will be enrolled in this study.

2. **Experimental procedures:** If you decide to participate, you will be asked to complete a questionnaire designed to determine which factors are most influential in Air Force civil engineer company grade officer turnover decisions. Data collected will be analyzed and results will be provided to Air Force civil engineer senior leadership in order to gain a better understanding of the factors that are influencing civil engineer company grade officers to separate from the Air Force.

The survey will be confidential. To measure certain demographic variables objectively and accurately (such that they aren't influenced by recall errors), years of service and number of days TDY and deployed, for instance, will be collected through a review of service records. Accordingly, participants are asked to provide their name. Other deployment data to be obtained through these records includes date, location, and duration of individual deployments. Electronic access to service records will be provided by the Civil Engineer Officer functional at Air Force Personnel Center (AFPC). At no time, however, will this AFPC representative see the participants' survey responses. Therefore, records will only be reviewed by members of the investigative team for this study and all necessary measures will

be taken to ensure that confidentiality is maintained. At no time will information be reported to any individual or organization in a way that you can be identified.

3. **Discomfort and risks:** We do not foresee any unusual discomforts or potential medical risks in the administration of this research. You will be asked to provide personally identifiable information, which is sensitive. In order to protect this information, all necessary measures will be taken to ensure that your confidentiality is maintained. Electronic data containing personal information will be stored in a password protected file on a secure server. Hardcopy data will be stored in a locked cabinet in an office that is locked when not occupied (the key is held by the Principal Investigator, Lt Col Daniel Holt). At no time will information be reported to any organization in a way that any particular participant or organization can be identified. Complete the questionnaire at your own pace and submit it when you are finished.
4. **Benefits:** You are not expected to benefit directly from participation in this research study.
5. **Compensation:** There is no additional compensation for participation. Active duty military will receive normal active duty pay.
6. **Alternatives:** Choosing not to participate is an alternative to volunteering for this study.
7. **Entitlements and confidentiality:**
 - a. Records of your participation in this study may only be disclosed according to federal law, including the Federal Privacy Act, 5 U.S.C. 552a, and its implementing regulations. Your personal information will be stored in a locked cabinet in an office that is locked when not occupied. Electronic files containing your personal information will be password protected and stored only on a secure server. It is intended that the only people having access to your information will be the researchers named above, the Air Force Personnel Center, the Wright-Site IRB, or any other IRB involved in the review and approval of this protocol. When no longer needed for research purposes your information will be destroyed in a secure manner (shredding).
 - b. Your entitlements to medical and dental care and/or compensation in the event of injury are governed by federal laws and regulations, and that if you desire further information you may contact the base legal office (ASC/JA, 257-6142 for Wright-Patterson AFB).
 - c. The decision to participate in this research is completely voluntary on your part. No one may coerce or intimidate you into participating in this study. You are participating because you want to. Lt Col Holt, or an associate, has adequately answered any and all questions you have about this study, your participation, and the procedures involved. Lt Col Holt can be reached at (937) 255-3636 ext. 7396. Lt Col Holt, or an associate will be available to answer any questions concerning procedures throughout this study. If significant new findings develop during the course of this research, which may relate to your decision to continue participation, you will be informed. You may withdraw this consent at any time and discontinue further participation in this study without prejudice

to your entitlements. The investigator of this study may terminate your participation in this study if he feels this to be in your best interest. If you have any questions or concerns about your participation in this study or your rights as a research subject, please contact Lt Col Michael Richards at (937) 904-8100 or michael.richards@wpafb.af.mil.

- d. Personally Identifiable Information to be obtained for this study includes the participant's name. All necessary measures will be taken to ensure that confidentiality of any Personally Identifiable Information is maintained.
- e. Informed consent will be obtained electronically. The first page of the questionnaire will contain a copy of the informed consent document. Participants will first be required to decide if they agree to participate (choose yes or no). If they choose yes, a field will be opened that contains spaces to enter a first and last name and a button to start the survey. If they choose no, their only option will be a button to continue, which will generate a message that states "Thank you for your participation." There is no way for the participant to enter the questionnaire unless they first agree to the informed consent. Once the participant agrees to participate in the study, a .pdf form of the informed consent document, complete with the participant's first and last name, will be stored in a database separate from the survey responses. These documents can then be supplied to the IRB at the completion of the study.

YOU ARE MAKING A DECISION WHETHER OR NOT TO PARTICIPATE IN THIS STUDY. BY AGREEING TO PARTICIPATE AND ENTERING YOUR NAME IN THE SPACES PROVIDED, YOU ARE INDICATING THAT YOU HAVE READ AND AGREE TO THE INFORMATION PROVIDED ABOVE.

Privacy Act Statement

Authority: We are requesting disclosure of personal information. Researchers are authorized to collect personal information on research subjects under The Privacy Act-5 USC 552a, 10 USC 55, 10 USC 8013, 32 CFR 219, 45 CFR Part 46, and EO 9397, November 1943.

Purpose: It is possible that latent risks or injuries inherent in this experiment will not be discovered until some time in the future. The purpose of collecting this information is to aid researchers in locating you at a future date if further disclosures are appropriate.

Routine Uses: Information may be furnished to Federal, State and local agencies for any uses published by the Air Force in the Federal Register, 52 FR 16431, to include, furtherance of the research involved with this study and to provide medical care.

Disclosure: Disclosure of the requested information is voluntary. No adverse action whatsoever will be taken against you, and no privilege will be denied you based on the fact you do not disclose this information. However, your participation in this study may be impacted by a refusal to provide this information.

Pre-notification e-mail from the Air Force Civil Engineer

CE CGOs,

The senior leadership in civil engineering are dedicated to better understanding some of the concerns and challenges our company grade officers face. Gaining your feedback will help us advance toward our goals to Build Ready Engineers, Build Great Leaders, and Build Sustainable Installations.

I am excited about the information exchange from the CGO forum during the senior leader meetings last December. Several of you participated in that event and provided valuable information to informal surveys in the weeks leading up to the CGO Forum. We are tracking several action items captured during the CGO out briefs and have made significant progress in several areas.

As another initiative to gain critical feedback from our CGOs, I have partnered with the Air Force Institute of Technology (AFIT) to capture several key attitudes our CGOs have about our career field and the Air Force.

In a few days, you will be forwarded a link to a questionnaire from Lt Col Daniel Holt. While your participation is completely voluntary, I ask you to take a few minutes to complete it because your candid feedback is important to me. Be assured that any feedback you provide will be confidential and no specific information about you will be disclosed.

With your help, I can better understand your concerns regarding our career field and can work with the CE leadership to address them. Thank you in advance for your support and for helping me "make a difference and make it better." If you have any questions, please contact Lt Col Holt, e-mail daniel.holt@afit.edu.

Thank you

MG B

TIMOTHY A. BYERS
Major General, USAF
The Civil Engineer

"Build to Last....Lead the Change"

Invitation letter from Principal Investigator

Civil Engineer Warriors,

In an effort to address the concerns of the Air Force Civil Engineer, we are collecting data to help understand the concerns and challenges that civil engineer company grade officers face. To do this, we have constructed a questionnaire designed to capture several key attitudes you may have about the career field and the Air Force.

To help the CE leadership, we would like you to complete a civil engineer officer attitudes questionnaire. The decision to participate is completely voluntary. For your convenience, we have included a link to the survey.

<http://www.afit.edu/en/Surveys/kriddelSurvey/>

As a fellow CE officer, I am very aware of the demands on your time. The questionnaire we have developed, while comprehensive, will only take 30-45 minutes of your time. Any information you provide will be strictly confidential and no information about a specific individual will be disclosed.

Thank you in advance for your support. With your help, we can better understand your attitudes regarding our career field and can work to address them. If you have any questions, please contact me at daniel.holt@afit.edu.

//signed//

DANIEL T. HOLT, Lt Col, USAF, PhD
Associate Professor of Management
Air Force Institute of Technology
Phone: (937) 255-3636 ext 7396
DSN: 785-3636 ext 7396

First e-mail reminder from Principal Investigator

Civil Engineer Warriors,

Last week you received a link to a questionnaire asking for your input so senior CE leaders can better understand the concerns and challenges our company grade officers face.

Over 200 of you have completed this questionnaire, on behalf of our leadership please accept my sincere thanks for participating!

For those of you that have not completed the questionnaire, I ask you to take a few minutes to complete it because your candid feedback is important. The questionnaire can be accessed at the following link:

<http://www.afit.edu/en/Surveys/kriddelSurvey/>

Rest assured some of the early problems we had with the link have been corrected. Still, don't hesitate to e-mail me if have any questions at daniel.holt@afit.edu.

//signed//

DANIEL T. HOLT, Lt Col, USAF, PhD
Associate Professor of Management
Air Force Institute of Technology
Phone: (937) 255-3636 ext 7396
DSN: 785-3636 ext 7396

Second e-mail reminder from Principal Investigator

Civil Engineer Warriors,

Last week you received a link to a questionnaire asking for your input so senior CE leaders can better understand the concerns and challenges our company grade officers face.

To date, over 330 of you have completed this questionnaire, on behalf of our leadership please accept my sincere thanks for participating!

For those of you that have not completed the questionnaire, I ask you to take a few minutes to complete it because your candid feedback is important. We will continue collecting data through the end of the week and the survey will be closed on Friday, 26 Feb. The questionnaire can be accessed at the following link:

<http://www.afit.edu/en/Surveys/kriddelSurvey/>

Rest assured some of the early problems we had with the link have been corrected. Still, don't hesitate to e-mail me if have any questions at daniel.holt@afit.edu.

//signed//

DANIEL T. HOLT, Lt Col, USAF, PhD

Associate Professor of Management

Air Force Institute of Technology

Phone: (937) 255-3636 ext 7396

DSN: 785-3636 ext 7396



DEPARTMENT OF THE AIR FORCE
AIR FORCE RESEARCH LABORATORY
WRIGHT-PATTERSON AIR FORCE BASE OHIO 45433

29 JAN 2010

MEMORANDUM FOR AFIT/ENV (DANIEL T. HOLT)

FROM: 711 HPW/IR (AFRL IRB)

SUBJECT: IRB approval for the use of human volunteers in research

1. Protocol title: An Analysis of Factors That Influence Air Force Civil Engineer Company Grade Officer Turnover Intentions

2. Protocol number: F-WR-2010-0013-H

3. Protocol version: 1.00

4. Risk: Minimal

5. Approval date: 7 January 2010

6. Expiration date: 6 January 2011

7. Scheduled renewal date: 6 December 2010

8. Type of review: Initial – Expedited

1. Assurance Number and Expiration Date:
- AFIT MPA F50301: 30 NOV 2011

2. CITI Training: Completed

3. The above protocol has been reviewed and approved by the AFRL IRB via expedited review procedures. All requirements, as set by the IRB and its legal counsel, have been fully complied with. **The purpose of this research is to test the relationship between several attitudinal measures, operations tempo, and turnover intentions of Air Force civil engineer company grade officers in the current operational environment. This study is a minimal risk survey of company grade AF civil engineers. The investigators will also be accessing AFPC data to verify the service members' deployment information with their responses.** This protocol therefore meets the criteria for expedited review in accordance with 32 CFR 219.110 (b)(1) and U.S. Department of Health and Human Services category (7): Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

4. HIPAA authorization is not required, since no HIPAA protected information will be recorded in the execution of this protocol.

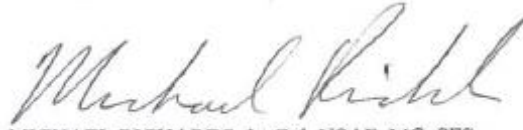
5. FDA regulations do not apply since no drugs, supplements, or unapproved medical devices will be used in this research.

6. This approval applies to human use research (as defined in 32 CFR 219 and AFI 40-402) portions of this project only. Attitude and opinion surveys associated with this research must be conducted IAW AFI 36-2601. If the study is being conducted under an IDE or IND, a copy of the FDA IDE or IND approval letter must be submitted by the Principal Investigator to the IRB.

7. Any serious adverse event or issues resulting from this study should be reported immediately to the IRB. Amendments to protocols and/or revisions to informed consent documents must have IRB approval prior to implementation. Please retain both hard copy and electronic copy of the final approved protocol and informed consent document.

8. All inquiries and correspondence concerning this protocol should include the protocol number and name of the primary investigator. Please ensure the timely submission of all required progress and final reports and use the templates provided on the AFRL IRB web site <http://www.wpafb.af.mil/library/factsheets/factsheet.asp?id=7496>.

9. For questions or concerns, please contact the IRB administrator, Lt Brandon Case at brandon.case@wpafb.af.mil or (937) 904-8094. All inquiries and correspondence concerning this protocol should include the protocol number and name of the primary investigator.

A handwritten signature in cursive script, reading "Michael Richards".

MICHAEL RICHARDS, Lt Col, USAF, MC, SFS
Chair, AFRL IRB

Appendix D: Open Ended Responses

This appendix includes the verbatim comments made by participants. No editing was done so errors (e.g., spelling and grammar) that were made by the participants are presented as they were presented in the questionnaire.

Overall I feel that I have good job satisfaction and could stay in the Air Force till retirement. However being separated from my family because of frequent deployments really sours the possibility of retiring in the Air Force. If deployment frequency and length do not return to a reasonable level, then I will strongly consider leaving the Air Force when my service commitment is up in 3 years. A reasonable level to me is once every 3 or 4 years like it was when I made the commitment to join the Air Force. I have full intentions to stay in the CE career field, but I do have aspirations to participate in the RAS program and then return to the CE career field.

The CE career field is in desperate need of a bonus in order to retain the talent that will keep it competitive. With the deployment tempo in the CE career field at a 1-to-1 dwell time, a bonus would help me choose between staying in and finding employment outside the active duty Air Force.

Dissatisfaction is due to location. I am stationed in a very rural remote location and local entertainment is minimal at best and long drives often requiring leave are required to find the kind of entertainment/weekend activities we like to do.

If the dwell ratio doesn't get down to around 1:4, I will definitely get out after commitment is up.

To be clear, my desire to separate is not based on Ops Tempo or Deployments. Deployments are arguably the best part of this career field. While the separation can be extremely difficult at times, if I was satisfied and motivated by the job I perform day (at home station, while not deployed) my family and I could live with the deployments. The fact is, for me, that I am not satisfied with the type of work I am asked to perform, or will be asked to perform as I progress through the ranks. Mid and senior level mgmt does not interest me the way that designing and project mgmt does. If I were to be a mid level manager I would want it to involve the field in which I am interested. As CE officers we are not asked to manage technically trained professionals. I have filled in as an Ops Chief for the last year, and while it is rewarding working with the craftsmen, it takes no special skill other than decent people skills. As a squadron commander I see that trend continuing. As a senior level manager you need to have program mgmt skills vs technical engineering/project mgmt skills. Simply put, opportunities to do things I enjoy decrease the longer I stay in. I can continue to serve my country through NAVFAC or USACoE and still do the things I'm trained to do and also interested in. The opportunities to do this as an Air Force civilian exist, there are just a lot less of them. I appreciate and respect you taking the time to analyze this survey. I care about the Air Force and the CE Career Field and want only the best of it. For me, however, it is no longer the best option to serve my country.

As for Ops Tempo, I feel that longer but less frequent deployments would serve us better. The real difficulty in deployments stems from the change, and this happens 2x a year at the current tempo. You hardly get a chance to get settled back in before you head back out (in either location). If we spent the same time gone (say in a given 2 or 3 year span) but in one shot I think it would infinitely more tolerable and efficient/productive. As for job opportunities, the AF is a great organization to work for but the engineering career field is very demanding right now. Compensation is great, but there is little you can compensate someone for time spent away from home. Still I'd rather be an AF engineer than a civilian engineer. The opportunities for advancement, the quality of people I work with and the importance of my job (especially deployed) are too much to pass on for a similar job in the civilian sector. The biggest deterrent to my continuing career in the AF is a lack of individual attention paid to my aspirations and/or desires. I feel like I'm just a number (particularly within the CE career field) in the system, not a person. If I want to do something that doesn't fall in line with a policy or guidance, it is automatically dismissed. There doesn't seem to be a lot of thought that goes into managing the career field. I understand that the career field is in many ways slave to the decisions made at the AF level, but I think that a more personalized approach would serve CE well. Every person has different reasons for wanting to stay or go and until that is acknowledged and careers paid attention to on a case by case basis, I think retention will continue to be an issue. You're going to have to deploy people for a long time to come, so days away from home aren't really going to change. So you have to look at how you can structure deployments to make the least impact and have the most predictability to families (e.g. the AEF cycles have changed every year since I've been in). You're always going to have engineers in demand on the outside, so you have to think of ways to make staying in more attractive by focusing on what people are dissatisfied with in their jobs. Again, this is different for everyone. Some folks might want to be more involved in actual engineering that we have degrees in (as opposed to pushing paper all day), others may feel that the pay scale is low for the effort we put in (and maybe retention bonuses are warranted), others may want simple recognition for a job well done. I think the only way you're going to solve this is to get supervisors involved in the career vectoring process. You need squadron and flight commanders to care about their junior officers and to mentor and provide direction and alternatives as issues arise. In my time, I would say less than half (if not a third) of those in positions to help young officers achieve their goals within the system have been involved enough to know that there was a need to be met. Lt Cols and Maj's are going to be the ones holding the bag when there are no Capt's and Lt's to backfill them in a few years, so they need to get involved right now. That, combined with some strategic level changes (both within the career field and the AF as a whole) need to be made to reassess how personnel management is conducted. A mass exodus is coming (if it isn't already under way). The question is, is the AF flexible enough to react to the personalized needs of their members or will they use blunt force (e.g. mandated stop losses) to maintain their engineer populous?

I have not deployed, but want to. My "window" is June to November and I have decided to volunteer for a 180 or 365 deployment if I have not been tasked by the end of March.

As the CE Career field gets more and more stressed with deployments and the continuing call from the civilian sector it makes it more difficult to stay in the Air Force and keep a balanced family life. Even with the economy being where it is there are jobs outside of the Air Force that pay as well or better that don't require you to be away from you family for 6 months out of the year and allow for better opportunities to advance academically. It appears that if the deployment

tempo stays high for the CE career field compensation in the form of a pay increase, bonuses, education, etc. will be needed to maintain the quality CE officers the Air Force needs. Other career fields, such as pilots, receive additional compensation to maintain their personnel and I feel something similar will be needed for the CE career field. I hope I can continue my Air Force career up to retirement, but I have to put the goals and well-being of my family first. I hope the Air Force can continue to meet these needs so I can continue to serve in the Air Force.

I am currently assigned as the Readiness Flight Commander. I had been moved from a satisfying engineering position because this would be "good for my career." To say it bluntly, I hate my job.

Technical Masters degrees keep being pushed but most CGOs seem to be asked to work from 0600-1800 at least 3 days a week at home station. Additionally, TA doesn't even come close to covering the cost of most technical degrees. - I'm an O-1 that was at home station a total of 5 months before I deployed (deployed before the 1 year point and was TDY for almost 6 months of 1st year) and received word of my next tasker before I even returned home. When are we supposed to learn our job/start a family/work on a masters/take leave?

I wonder if you'll consider me an outlier. I really wouldn't believe it if I saw a spread of the data without a statistically significant cluster of data points surrounding the 'very dissatisfied' responses I gave. This hellhole where I live is beyond messed up, to put it lightly and politely (I have a better, profanity-strewn assessment of my base and the CE squadron here, but I'll save it). We've had a unit climate assessment which caused no change. Most of the unentrenched people who work here (the ones under fifty...you know, the productive ones) are attempting to find new work/move, and those who do move write back to tell us how happy they are to be at a less screwed up organization--places where they don't feel like they're breaking the law and such.

I am sincerely dissatisfied with the AFPC program in all my interactions with it. I still have not been to ASBC which is almost entirely useless to me having already been on active duty for 6 months. I have also been tasked for a deployment so I might not get the misfortune to go to ASBC until I have been active for over a year and a half. I did not get placed in any of the bases I requested and one of my fellow CE LTs PCS'ed to a base I requested when he requested the base that I am at now. The process involved in base placement is a complete joke. If the current deployment schedule remains 1 to 1 then I will definitely get out when my commitment is up if at all possible. My future family is more important to me than the opportunities the Air Force has currently. I am proud to wear this uniform but I feel that the Air Force has been misleading in several circumstances and I feel somewhat taken advantage of with the Air Force.

My entire AF career I have worked with civilians for civilians. I was excited about commissioning because I looked forward to the leadership opportunities the AF supposedly had to offer but I've had no leadership opportunities outside of UFPM and various other side jobs available. I don't work with any airmen and I've never supervised any. I like military healthcare and the pride of serving. I'd rather work for a bigger cause than just [the corporate bottom line] but those 2 benefits can only make you happy for so long if you're not happy with any other aspects of your job. I'm basically working a civilian job already but with deployments every year or so. So what incentive do I have to stay in when I can make the same or more money on the outside and not have to put my family through deployments?!

I haven't been in the Air Force long, but I've already had more than 1 problem with AFPC. It's fairly discouraging when my PME and potentially deployments are messed up because I can't be worked into the system. I'm sure they're busy just like everyone else, but that seems to be the area that has given me the most grief. It is possible that if it continues to be this hard for me to get my PME or situations handled with AFPC, I don't know if I would find it worth it to stay in.

The biggest issue impacting my decision to stay in the Air Force is the current Ops Tempo (deployed). With a new baby, a 1:1 deployment ratio is not attractive. Understood that it is being worked and that we really haven't gone through more than 1 full cycle of it, but the perception of the 1:1 affects people more than the real thing. Once people start to experience it, a real change will be seen in attitudes one way or another. Also, with just having attended SOS, I have a growing dissatisfaction with pay. Particularly because of the interface with other career fields. Pilots make up to \$8000 extra per year in "flight pay," regardless of deployment status and make the same bonuses that we do while deployed, yet the current mission of a Civil Engineer is many times more dangerous than what pilots do and we have a more constant work environment (compared to a pilot flying 1-2 times per week and having a desk job the rest of the time with little responsibility). Having met and talked to Fighter, Heavy, and Support pilots, it has changed my perception of my own pay scheme. It seems as though they are simply being paid extra for being the "sexy" part of the Air Force, not for doing something additional or more difficult.

A survey such as this one is a great step in understanding some of the frustrations and successes of the CE career field. Please take this data seriously and use it to act in a manner that positively affects the CE community.

Not an engineer by degree, thus have not taken the exams. I am an architect by education and previous experience, but am not licensed. Child is homeschooled so school questions were difficult. Disappointed with local schools, but happy with homeschooling.

I'm too junior in my career to form a definitive opinion on the AF and the CE career field just yet. However, from the experience I have thus far and CE officers I have conversed with, right now I feel that the work at garrison seems monotonous and unrelated to what I will be doing deployed. I would like to deploy and in fact chose to do CE because I thought I'd get interaction with the squadron, utilize my leadership skills, and serve my country down range. However, truthfully I am dissatisfied since these aren't happening. I understand my role as a programmer involves many civilians and that leading a flight will not happen yet, but the only face time I get with the enlisted is during PT, squadron events, or if I go out of my way to interact. I chose CE b/c I thought I'd be involved in building schools, hospitals, beddown for the units deployed, helping the people get back on their feet, other military endeavors, etc, but it seems that is too far and few in between. Most of the deployments in which CE officers enjoyed were only those in which they got to do a PRT, work with Red Horse, or get attached to an army unit. I do my work at garrison the best I can and am trying to better myself while I have the time, but I fear deploying only to do programming in the same desk setting. One other big concern from CGOs I feel is graduate school. Most of the CGOs want to attend a credible university full time and resist the idea of getting an online degree. The slots available to attend schools with name recognition seem to be far fewer than the other services. Another method of enticing CE CGOs is allowing them (after they pass a prescreening of course) to attend army schools such as Sapper school. I know several, including myself, who would like the opportunity. These expressed opinions are that of a very junior single Lt who has not deployed yet. However, from what I've

studied and people I've talked to, I feel that generally from young unmarried CGOs, these are some of the main concerns. Thank you for your time.

To start with, I have been very fortunate and believe that in general the AF and CE career field have taken good care of me. It started with a CE scholarship and continued when I got my #1 or #2 assignment on both PCSs. I have had good Squadron Commanders who took care of me more often than not. HOWEVER, I often feel like I am a minority among my peers. My peers are frustrated because they have commanders who DON'T do things like submit them for awards, push hard to get them good assignments at their next bases, give advice on school or career broadening, meet and get to know their spouses/kids, help them navigate the AF. I'm talking about good CGOs who have these problems too - not dirtbags. If I see a CGO with an unfixable bad attitude or a poor work ethic, I don't want them in the AF - and I really don't want them getting top assignments or awards either. Interaction with FGOs is a HUGE factor for CGOs deciding whether or not to stay in. Some bad experiences that will stick with me: My CC, his wife, and the chaplain all somehow calling my wife by the wrong name at my promotion ceremony shortly after being introduced to her; a brand-new major (who observably wasn't well respected by his peers) pulling me and several other CGOs aside repeatedly to "mentor" us and giving us HORRIBLE advice; various fat FGOs in joint environments being ridiculed by Army/Marine peers; being "forgotten" while I was deployed and not getting recognition for any work I did. Some good experiences: [my base] SQ/CC submitting me for annual awards, ensuring they got on my OPR; [my base] CC submitting me to be an MSG Exec; [my base] CC helping me get a RED HORSE assignment; [my base] CC meeting my wife and hanging out with us at the club, downtown; [my base] CEO allowing me to use his home woodshop for weeks after work to make a gift for my wife; [my base] CEP hanging out with me and spear fishing on weekends; [my base] CC pushing to get me in SOS and assisting with work problems. We really need to focus on FGOs NOT "mentoring" - get rid of the buzzword and focus on what it really means. They know how the AF works and should be getting involved at some level with the lives of the CGOs. Even if it isn't hanging out off duty, they should be explaining how to deal with medical, what to expect at work, life during deployments, social etiquette at functions. They can weed out the BS and help CGOs develop their careers. I think sometimes FGOs forget that we lead PEOPLE to accomplish the MISSION and the interaction and the relationships built through it go a long way to retain CGOs and build us as officers. Maybe a "welcome to being an FGO" course at AFIT? I know there are CC, CEO and CEP courses but maybe something more general and short that gets FGOs geared up to be mentors? Just a thought. I've only deployed once, which is nice for family but perceived as bad for my career in today's AF. It is part of why I joined RED HORSE - to "catch up" with my peer group on deployments. (there were other, better, but irrelevant to this survey reasons too) People go into Combat Skills Training with bad attitudes and the expectation that it will be AF training and don't adapt. My biggest frustration with joint deployments is that we (AF) don't do a good job policing the Army when they submit requirements to JFCOM. My job was relevant, but there were 10 other AF people in my unit and only a couple of them had a full day of work each day. I expect a different experience next month when I deploy with RED HORSE. I'll probably have a few complaints about talk Total Force Integration since we're supporting an ANG unit! My only other complaint is that medical care for spouses has been horrible at all three bases. My wife is treated like a second-class citizen by every Medical Group. Examples: calling for "same-day" appointments, because they are the only way to get appointments and getting a different doctor every time to deal with SERIOUS recurring medical issues; in separate instances, calling for an appointment for bronchitis once

and strep throat once and being told that she could come in 3 weeks; being told that the dental clinic doesn't treat spouses even though she had severe tooth pain; asking for anxiety medication for flying stress and being told that she didn't want to be knocked out when the plane crashed; waiting over 2 hours for prescriptions. Why do "military in uniform" get priority all the time at the clinic and pharmacy? Is our military "productivity" so important that we have to denigrate our spouses and families who already feel second class to the military? Why not do 2-3 hours around lunch like AAFES? I don't see myself getting out of the military for myself. I've already had enough good senior officers and jobs that I think I can endure a couple bad experiences. I also feel like the CE career field has taken pretty good care of me and I really enjoy what I do. The only thing that will possibly cause me to get out of the military is if my wife continues to come home from the base hospital or clinic with horror stories. I'm already going to look into different TRICARE options and see about paying more out of pocket and going off base, but if that's not feasible I'll consider getting out of the military to keep her from crying at the clinic any more times.

The biggest factor in my dissatisfaction with the Air Force is that I did not receive a Joint Spouse assignment; my wife is a weather officer at [another base]. She will PCS after 2 years time-on-station, so it wouldn't make sense for me to fight for an early PCS so I can get to [her base] just in time for her to leave again. I realize that we ran the risk of not being stationed together when we joined, but when I went to CE101 I met a bunch of guys who were stationed at bases my wife could've gone to (Barksdale, Elmendorf, Davis Monthan, etc) and they all would've traded assignments with me, had they been asked. Also, the vast majority of the class did not get anything on their dream sheet; I met people who volunteered to go to Minot, Columbus, etc and they didn't get it and I also met a lot of people who got choice assignments, even though they didn't really want them. I realize that we're fresh out of ROTC/Academy and we don't have a lot of control over our assignments, but this is our first impression of the Air Force. Right now, the general consensus is that the AF shouldn't have even bothered giving us dream sheets. Personally, I joined because I want to deploy and serve my country abroad. However, I fear that the AF will continue to create unnecessary hardships that profoundly affect my life (e.g. stationing my wife and I apart). Also, all of my CE buddies from college have found engineering jobs, they're all making more money than I am, and I hate writing this because it sounds self-centered and arrogant, but engineering is a sought-after profession and not just anyone can get a BSE; there's a reason more than 90% of the kids who started engineering at my college didn't graduate with an engineering degree. So when it seems like the AF takes our services for granted (dream sheets not taken seriously, no CSRB, etc), it becomes really difficult to justify staying when we can personally benefit a lot more elsewhere. Basically, if the AF isn't loyal to us, why should we remain loyal to the AF?

My responses to this survey are based on the fact that I have already decided to separate upon completion of my commitment. I have no hard feelings or negative thoughts about the Air Force, but the Air Force and myself do not fit together. Also, I have already been in contact with Cameron-Brooks (a company that places junior military officers in positions with corporate companies), and I am working with them to prepare myself for my transisiton and to set up a job opportunity once I am separated. Furthermore, I am engaged to a pharmacist, so I would be extremely insulated from any financial repercussions caused by my separation due to her employment/salary. Finally, I would like to thank you for conducting this survey, and letting

CGOs have their voices heard instead of assuming the normal "one of the herd" role that many of us are stuck in.

The biggest issue for my retention is assignment selection. I am married to another active duty officer and we spend very little time together. She is on a 1:1 dwell as we are and when we are both home at the same time, it is nice to get to spend time with her. However, if joint spouse assignments are as hard to get as this last one, I will find another job that allows me to live in the same house as her without the fight with AFPC. I enjoy the deployments because that is where we have the greatest impact on the mission. If I could leave CE, I would want to fly for the AF because then I would be the mission. However, I am content to perform this mission and deploy when called upon to do it. As anybody would, I would like to see a reduction in the dwell ratio but understand that we must do what the COCOM's require based on war fighting needs. Deployments are ok, but don't mess with the time that we do get to be home. Thanks for the opportunity to provide this feedback. It shows that [the AFCE] cares about his CGO's or he is losing too many of them to remain effective. Either way, it is appreciated.

When I joined the deployment rate was 1:4 and I was convinced I would make a career of the Air Force. When it increased to 1:2 I began to have doubts. If it increases to 1:1 as has been suggested, I will undoubtedly separate. Strongly recommend sending 62E developmental engineers, many of which would like to deploy but don't, to assist with the CE 32E career field deployment rate. They are generally equally qualified, motivated, and hold the same degrees as their CE counterparts. I do not understand why a 2Lt CE officer with a degree in electrical engineering and no construction experience (perhaps CEX) is considered more qualified for a deployed project manager position than a 62E Captain with the same degree, more management experience, and who has yet to deploy but wants to go. If required, the 62E could simply attend our 6 week 101 training TDY prior to deploying and have every bit as much deployment relevant work experience as many CE officers do.

My future deployment tempo, not covered in the survey, will be very high. I am not looking forward to the number or amounts of time that I will be deployed. Last, I do not think that short tours should have such an impact on deployment lists. Two troops can deploy for about 180 days, and one can have 0 or 1 short tours and another can have 3. This doesn't seem to make sense. Let's resort the lists to simply show the number of days a troop has deployed--apples to apples.

I don't know what lies ahead in this survey, so I'll take this first (and only?) opportunity to state that (while this will surely result in self-identification), I am not currently serving in the CE career field.

I would like more help and information from the CE functionals at AFPC in trying to increase my career development and better placement. I feel that I am being treated like a number at AFPC and at my home station. I would like to see the four year on station be decreased to two years on station so that we can see other opportunities at other locations. Job satisfaction for CE Officers are at a low because we are not being treated as leaders, but summer hire type personnel. Enlisted get more leadership opportunities than the officers. Most CE officer positions are filled by civilian personnel and the officers are merely workers and non-decision makers in the squadrons. I did my homework on rejoining to the 62E career field (where they are 42-person underman versus the CE evenly manned) and had a package ready for approval for a nice Air

Force position, however, it was easily denied by the the AF Functional. CE Officers do not feel represented by the CE Functionals.

I love the CE career field. I can't see myself doing anything other than being an engineer. However that attitude has more to do with my own convictions, desires and dedication than anything the AF has done. Please understand the line I draw, and you've drawn in the survey between the Air Force CE career field and the Air Force, at large. I agree completely with the delineation between the two. I mean no disrespect, but engineers are trained professionals that have a highly marketable skill regardless of economic conditions. In that case, how am I any different from a Doc or a pilot? Why should they get paid more for their professional expertise and have a higher rate or opportunity to promote? Some of the stresses of this job exist outside the AF and there are benefits and drawbacks to military and civilian careers in the engineering field. What incentive do CE officers have to recommit to the AF? Another deployment cycle? Another move for their family? This is why I think you see us flip-flopping when we are asked to recommit. An example. Several years ago we paid many Captains, big big big money to leave. I was at MGT-101 at the time. Instructors were telling young Lts all about it. Big foul. Don't think for a minute all 100 of us weren't doing the math in our head. 4-8 years = \$250K + stability. I'd be willing to bet if you offered us a bonus, of any sort, to stay, we would. Those instructors didn't hate their jobs, in fact most of them spoke highly of the career field and some even of the AF. Bottom line, most of us love this job and we work hard. We understand the career field is changing and becoming exponentially more demanding of our time and our families time. At the tactical level, we accept it. I believe we'd like to see the strategic arm of our career field push the Air Force for changes to retention bonuses and allow us to compete for early promotions.

I have only been in the AF about six months, and I've pretty much found it a letdown. I had great track record and worked VERY hard as a cadet, and then pretty much got stationed in [my base] (which I don't like and where my husband has limited job opportunities), and am a Program Developer, where I pretty much do data entry all day. My job in garrison is extremely boring and a waste of my degree and has no leadership aspect, so I actually DO look forward to deployment experience, however, the six or twelve month deployments and 1:1 dwell time look like it would be a little more than I can take and would not be good for my family life. The Air Force has been great to me in things like healthcare, housing, and paying for school, but the job just hasn't been all that it was talked up to me, and I feel pretty demotivated. All in all, I'll do my time, but I'll get out once my four years are up. And when I do, with a CE degree, I'm not worried about civilian job prospects, although really I plan on going to medical school when I get out.

There are no incentives for CGOs in the CE career field, not to mention, that engineers in the Navy and Army get paid more and are offered more benefits than Air Force engineers. It is hard enough to fill the daily requirements in garrison with the few personnel we have in CE but now it has become nearly impossible for us to maintain a garrison and expeditionary functionality now that we are fulfilling Army taskings in addition to our own. In response to our Air Force specialties, I really don't understand why the CE career field tells individuals such as myself (32E3A) who are going to specialties other than 32E1G that they will be beneficial to the career field when the career field does not even use our expertise and has become solely reliant on civilians. I would feel better about our occupation if I could actually use my Architecture skills that I developed throughout the process of obtaining my Master's degree. It is due to this

negligence of not acknowledging one's specialty that we end up classifying every officer in the career field as a "Civil Engineer" but then requesting an Electrical Engineer on a JET tasking when that officer hasn't practiced EE since they graduated college a few years ago. It hurts our diversity and our varying proficiencies.

Q2: Regarding chances of promotion, I think we have great opportunities up to O6, but that's the limit of what the typical CE officer can expect. And almost all the senior officer billets are staff jobs, not command. Not that I have any ambition to be a G.O., but sometimes it's hard to swallow that our career field works harder and gets more leadership experience, but has less, if any, chance for senior levels of command. Q8: I think as CGOs, we get more chances to get ahead early in our careers than engineers in the private sector. Definitely one of the best things about CE. Regarding deployment history: While I have been shielded from deployments due to A-76 and PCS, I am scheduled to be gone 8 out of the next 10 months due to TDYs and deployments. Regarding deployment tempo: All our officers in the last bucket deployed, and all of us in the next bucket have taskings. On top of that, our squadron has had to turn away several taskings for the next cycle because we didn't have anyone else available to fill the slots. I know the official line is that the 1 to 1 dwell is just a posture, but the perception at the base level is that it is reality and will be for the foreseeable future. General Comments: I'd like to pass along a thanks to our leadership for focusing on the CGOs and our concerns.

The CE career field needs to clarify if they feel a technical Masters and/or a PE is important. We just had a CE Senior Leader come and flat out say that the AF does not care if we are technically advanced and have a PE, they would rather us be good leaders. Just need a clear vector on this. Lately Senior leaders have been quick to point out that we are only postured at 1:1, not actually deployed at it. I know for the most part we are not deploying at that tempo, but it is really a slap in the face to the ones that are how quick it is dismissed. Also, I have not heard any formal feedback from the CE Senior Leaders Meeting. [the AFCE] said there were a lot of action items that came out from it, but I have yet to see any.

RETENTION BONUSES? ARE THERE ANY IN SIGHT FOR CE OFFICERS? I THINK WE SHOULD GET A 1 FOR 1...\$30-40K TOTAL, \$10K FOR EACH YEAR ACCEPTED...\$40K FOR A TOTAL OF 4 YEARS OWED BACK TO THE AF. WE ARE WAY BEHIND THE OTHER SERVICES YET WE ARE THE ONES FILLING THE JET BILLETS. THANKS FOR THE OPPORTUNITY TO TAKE THIS SURVEY...ULTIMATELY, THE TIME SPENT AS YOU MAKE RANK AND HAVE INCREASED RESPONSIBILITIES IS WAY TOO MUCH ON AN INDIVIDUAL THAT MAY HAVE A BIG FAMILY BUT MORE IMPORTANTLY IS JOINT SPOUSE. THAT IS THE ONE THING MISSING ON THIS SURVEY...JOINT SPOUSE. AS WE BOTH MAKE RANK WE BOTH HAVE INCREASED JOB RESPONSIBILITIES AND INCREASED OPS TEMPO...JUST NEED SOMETHING EXTRA TO OFFSET THE SACRIFICE. ie...ONLY ONE RECEIVES DLA WHEN PCSING...CHILDCARE HOURS ON CASE ARE LIMITED STILL TO 10 HOURS OF CARE AND WE HAVE TO PAY THE OVERAGE...MAYBE SOME SORT OF INCENTIVE STIPEND TO OFFSET THE TIME SPENT AWAY FROM OUR FAMILIES AND EACH OTHER.

I believe in the enabler concept; I have no problems deploying and completing my duties; however, when my peers in different commands have yet to deploy half as much, I think the system is broken. CE needs to look at each tasking by the individual, regardless if AFIT students

or other CE officers not in our "traditional" line of duty & for those that had to earn a Master's on their own time to complete the unwritten checkmark, the war didn't stop.

Deployment Tempo is one of the main reasons I'm getting out. 1:1 and 1:2 dwell do not allow a young, "single" individual to have any semblance of a life at home, unless they've already been married for many years and the spouse/kids are already accustomed to the individual being in the military and being gone all the time. I understand our core value of Service Before Self, but there still has to be a balance, and right now it's out of balance. We're kicking service members out because the metrics say we're over-manned, yet we're all on 1:1 dwell and leave EVERY year with no relief. Before downsizing or force shaping again the AF needs to look at the real numbers of who's really out there getting the job done and find a balance for them. The overall main reason for my impending separation is lack of job satisfaction. The AF paid for my degree and I'll never use it here. I understand as a Lt we have to move up in the ranks before taking on leadership positions or having "more fulfilling" jobs, however I see what our Ops Flight Major does and I see what our Sq CC Lt Col does every day and sending emails and coordinating from a desk are not any more fulfilling than the office work I currently do. Other folks say "wait until you're deployed and it'll be better"... I did the same Programming and Design job overseas on both deployments that I started with as my first duty at [my first base]. It was the same tied to the computer doing emails and paperwork routine with construction projects taking just as long or longer to complete -- meaning no fulfillment in seeing them done there either. I would like a job that will exercise my mind and make me think and challenge me every day. If the AF could do that and would slow down on deploying Lt's and Capt's every time they're vulnerable to go, I would consider staying in. It's also difficult to work within a system that does not truly reward hard work with anything other than more work. If you're a shining star you get assigned more duties because the assigner knows you'll get it done, rather than spreading the wealth and later assisting those who need the help. Award packages go to those who write the best bullets, not necessarily those who deserve it, and even then you are awarded a trophy and another bullet to put on an OPR (no opportunity for promotion or a raise or to climb the ranks through your own merit). I understand the corporate world is cut-throat and not perfect either, but the opportunity for intellectual and professional growth is much greater and for that satisfaction I'm willing to risk job security. I don't mean to be overly negative, as I do have tremendous pride in the USAF and US military as a whole and I will look back and smile on the 5 years I will have served, but I feel that my opportunities for growth are stunted and I will not let myself continue along into a career that does not challenge me. I hope this is taken as constructive criticism and not dismissed as disgruntled banter as I know there are others who may not choose to be as verbal as I have been. In any case, thank you for reading.

My family is more frustrated and tired of deployments than I am. I don't mind the deployments and the job, however some of the deployed jobs are not really required. The CE careerfield is overstressed and burdened by undo demands, rather than filling positions with bodies we need to focus on filling requirements. Requirements based taskings would increase job satisfaction as well as possibly decrease personnel required to deploy. Additionally, jobs need to be matched to individual experience levels, not just a position needs filled basis.

Only suggestion I would make is fairness in deployments. Two fold: 1) Number of times/months gone should be considered even if we transition to Enabler, ie slower tempo for those with alot of deployment time and higher for those that have not, to even everything out. 2)

Strategic Sourcing of deployments- This is my fourth and I had to fight with MAJCOM to get a switch, there is no reason a person should have to go back to same place and perform same job they have already accomplished. Going back to perform Project Engineer position at same base I preformed it 4 years ago is not appealing or provide for professional growth. Other then that get out our story. WG and Group have now idea what we are going through, best case is they know we are gone alot. As confirmed at SOS in res, other career fields have no idea that we are deploying so much or covering for the 50%+ that is out the door when we are home. WG just wants it done regardless if personnel are there. 1:1 does not equal 6 monthes at home(or working for Sq), when CST does not count. When you take into account the 2 weeks of R&R, years worth of leave and PDMRA Leave. I am lucky to work for Sq for 4.5 monthes. This makes it difficult to make impression with homestation CE/CC and MSG/CC let alone get Masters knocked out. Beyond that I take great pride in what CE officers do. I think our job can be one of the hardest given the breadth but can be very rewarding.

To explain some of my answers, I have not delployed yet, but will be deploying in a few weeks. While I have no problem going where the Air Force needs me, the tempo, if it continues to pick up to a 1-1 dwell ratio, will be very hard on my family and I will not stay in any longer than my commitment if that is the case. Also, my wife is an officer in the Air Force, but due to the deployment potential, she will definitely be getting out once her commitmet is over because we do not want to risk both being deployed at the same time or both simply being deployed often while raising a family. It is also a battle to get experience in civil engineering that will work towards a PE in the Air Force, and that is slightly discouraging. However, my wife and I both love the Air Force and Civil Engineering is great - we have absolutely no regrets up to this point. But the ops tempo is a main reason we would not continue in the Air Force once our commitment is up.

I think it is important to know the current job I have along with my answers. I currently teach and am sheltered from the majority of exercises, training tdy's, and deployments. Before that I was in grad school for 16 months. But by the time I reached 5 yrs commissioned service (which was 6 months into my [teaching] tour), I already had 2 deployments (short tour qual'd) and a remote in Korea under my belt. I am scared out of my wits about returning to mainstream CE, about the ops tempo, especially given that I am the single parent of an infant. I am using my next assignment as "The Test" to see if I can survive being away from my little girl so much, if I can survive taking work home with me at the end of the day because I can't stay late as a single parent. I also think it is important to note that wanting to lead a CE squadron is nowhere near the same thing as wanting to be a BCE. This goes back to the questions about perceived job satisfaction now and in the future. We do great things (CE) and I want to provide troops an environment in which they can flourish...but its daunting to see how BCEs get beat up, it's frustrating to see the inequities in expectations (some justifiable and some not) between the operators and the support functions. Someday, I can imagine loving my job as a CES commander and hating my job as BCE.

My current base location contributes to my wanting to leave. Another location could very well make me forget about separating. I do feel that I owe it to someone to stay in, though no one has ever implied that to me. I just feel like if the good people get out, the AF will go to [expletive]. On the other hand, I feel like I could stay in and spend my entire career butting heads with [expletive] that are promoted ahead me because I am not willing to politic for advancement. I

also realize this is a flier's AF and they will always be my boss. I have a definite ceiling to my level of success. Another appealing idea is moving to the Middle East and working for a year or two doing similar work to what I do on deployments but making boatloads of money. I could then come home and take my time finding the job I want.

Please make your results available.

I am overall satisfied with my AF career and life. I don't mind putting in the late hours or taking work home with me. That is because I currently do not have a wife and kids. In the future that may change. I can say this for certain I have watched three CE Commander in my career thus far and watching the crap they go through leaves me wondering if I want to continue an AF career and even think about becoming a BCE.

Deployment tempo not currently an issue - I joined the AF to deploy and support our current overseas operations. My dissatisfaction comes from garrison level jobs that are severely hindered due to existing bureaucracy and processes. Pay, benefits, etc are not issues- the current level of compensation is adequate based on our jobs. Bonuses would do nothing to keep me in the AF; I did not join for money, but to serve. I am currently looking to accept my next assignment, though afterwards I plan to separate. Current plans look to the guard or reserves. I plan to stay in the AF for the long haul, however there's no way I'll stay active duty. I'm getting ready to marry another military member (JAG) that is at a different base than I am. If we cannot get stationed together after the wedding (by normal PSC, when the time comes), we are both planning to separate, as both of our commitments will be up.

This survey seemed to be trying to determine our motivation for service, but for me, it asked many of the wrong questions. I don't serve because I feel obligated or would feel guilty if I got out, and I don't serve because of the money, benefits, or how the civilian job market looks. I serve because I deeply desire to serve my country. The (retention) problem for me is when I look at the balance in my life. I am motivated to serve, but at what cost? If I am merely sacrificing personal comfort, safety, and desires, there is no question; I would continue to serve without hesitation. The problem arises when my service negatively impacts my family, especially when that impact becomes severe. My marriage is currently falling apart, but there is still hope for it to survive. While the Air Force was not the only factor, it has played a significant part in devastating my marriage. I would like to continue to serve beyond my current commitment, but if I receive another assignment that is not compatible with my husband's employment, my family has to come first. When we decide to have children, I will be unable to continue to serve due to personal beliefs about the role and importance of motherhood. My time in the Air Force is limited, but I'm not sure how many years it will be before the balance crumbles and I cannot continue to serve.

Below are a couple of comments I have: 1. Education Opportunities - For the last 6 months, I have been acting in an FGO billet at my base as a junior Captain - it's all we had. I've been working exceptionally long hours, but the reward is great and I really enjoyed the job! However, how am I expected to get a masters at night with this Ops Tempo? I know the Army allows their Engineers to get a Masters (in what we would consider a CI slot capacity) or receive a generous bonus before proceeding to their next unit. Why hasn't the Air Force recognized that we're deploying at the same rate as the Army (although 6 on/6 off vs 1 year on/1 year off) and made allowances for us? 2. PME Slots - SOS slots are passed down to the wing and it's up to the wing

to determine who gets to go. Many times, CE Officers (and other MSG Officers with similar Ops Tempo) are at the top of the list, but can't go because they're deployed so much. When we get back, sometimes we get lucky and get sent, other times we get knocked out for someone else at base because they've done more there in the last 6 months or we have to PCS and start over. How are we supposed to complete with that? How will we get our PME accomplished as the Air Force wants us to? 3. Recognition - I love what I do. I like leaders that understand and recognize what I do. Many times, a simple thank you is more than enough for the hours and issues that I work and for the things I make happen. However, leaders that talk about the bombs that are dropped and can't even relate to what we as Engineers do is brutal on the troops and CGO's. Understanding what we do and all leaders (not just CE leaders) saying thank you will do wonders for CE. Bottom line, I'd like leaders to really understand what it is we do (not necessarily all the rules and regulations behind it) and to say thank you. 4. Deployments - I like deploying. I get the opportunity to work on my war time mission, I can design buildings and I can really do some good things for our front line troops. I applaud leadership for finding those that haven't deployed and making them go or having them get out. With that said, I like home station time too...I do not want to deploy more often than I already do. Thank you for listening. I certainly hope these comments and my responses help with the career field.

Most demographic comments are related to current assignment at [my base].

First of all most of these questions probably needed better set up because you could attack them with a lot of different mind sets depending on how you read the question. For instance I took "part I" as home station job but that was not clarified and I took "CE career field" when asking about job opportunities to include the private sector as well but once again that was an assumption. This much interpretation in a study with radio button answers can lead to skewed results. Currently I have deployed once and it was perhaps the most fulfilling 189 days of my life and that is the only reason I am still on the fence because as much as I hate leaving my wife. My time deployed was so rewarding and I wasn't even at a small FOB/COB. I never even went outside the wire. Home station work is so ridiculous. You can never get a straight answer on something you are trying to fix and when you finally do find out the necessary information. Certain people will try and squash your efforts for cost saving and efficiencies because "this is the way it always happens" or "we are the government the mark up is because of all the paperwork/red tape the contractors have to deal with". Its frustrating and breeds cynicism. Also it seems like the AF wants you to further your education but doesn't want to fully reimburse you. I will be one class from my Master's in CE after this semester and the TA only covers about 40%. SO when I take 2 classes a semester I pay over \$1500 out of pocket. Don't get me wrong the \$250 is nice but if your looking for quick ways to sweeten the deal and keep people in it couldn't hurt. Just in case my friend is too busy being deployed to fill this out. I will help voice his situation to show just how much AFPC cares. My buddy not even at his 3 yr mark will get back from his 2nd deployment in late March and a couple days ago he got a call from AFPC saying you are PCSing and your choices are Korea and ..Korea. O and by the way your RNLTD to Kunsan is 10 May less than 45 days after he returns home from Afghanistan. Are you kidding me this man has spent roughly 35-40% of his AF career deployed already and you NON-VOL him to Korea. Ridiculous!

I am dissatisfied with the medical/dental services at my current location. Overall, I am happy with the care provided by the Air Force just not at my current base.

Thanks for your research. Hopefully you can provide quality analysis to are senior leaders (current and future).

Note that I am currently on a short tour and this survey only covered deployments. For this reason my answers may be a bit skewed. One of my major issues is that a link is not made between amount of time deployed and amount of time on a short tour. Both of these items take you away from family although they are titled differently. Thanks for the survey!

I like the Air Force and CE, but I don't feel our career field tempo is understood by bigger Air Force. While in garrison, CE officers are expected to live up to the same standards as other, not-deployed-as-often career fields. Sure, we also stack up well when compared against those career fields for promotion and awards, but when will that impact finally stop affecting our home life? I would like to stay in the Air Force until retirement, and feel I could make a contribution to the career field by staying in, but the way it stands now, and the way it looks like the ops tempo will continue to go, I could not have the family life that I desire. That would be the number 1 reason I would get out. The pay is fine, the places I have been stationed and the people I have met are great, but when I am not even there to enjoy them for half of my life, it could push me out. I'm also married mil-to-mil, CE to CE, and while that is also a personal choice, I feel not only for those couples that are officers, but also the enlisted force married mil-to-mil that just don't see each other because they are deployed on opposite cycles! The career field could do a lot by employing some positive propaganda. Right now the rumors that rage are that the Army doesn't deploy the engineers they do have, and that the Navy pulls out of taskings, and the Air Force takes them (is forced to take them, chooses to, I don't know). I have seen that personally on the deployment I am about to leave on. Recently I saw an explanation of the hub and spoke concept of Afghanistan, and while that is great for those going on Air Force deployments, when are we going to get some good news about ILO/JET taskings, and not have to go to CST anymore/as often? My latest experience with CST at Fort McCoy was definitely underwhelming, and honestly a little frightening considering they expect that training to catch us up to the Army and make it safer for us to be outside the wire.

Overall I have enjoyed my time in the AF and CE career field. However, the frequency of deployments and TDYs coupled with the amount of non-core related tasks I am expected to do while on home station makes me dissatisfied with my circumstances. I do not appreciate that the deployment/TDY rate has remained high even with a dwindling pool of officers. I also am dissatisfied with the fact that I have one set of job responsibilities and co-workers at home station, and a completely different set in war time. I think a lot of the difficulties in deployment could be overcome if CE drew a line in the sand that differentiated garrison engineer support from combat deployment support and we went to war with the unit/people we regularly trained, much like the Navy Sea Bee/NAVFEC model. This would improve my aptitude deployed, and give family members at home a stronger support network. Finally I do not look forward to my future possibilities as a senior CE officer. After several combat deployments, I would like to continue to lead/train engineers for contingency operations. Instead my senior leadership possibilities are restricted to garrison facility management, which could be done by a civilian and seems to mostly emphasize aesthetic pleasantries for the non-combat AF.

Naturally, most of my concerns are with our current ops tempo, which is a multi faceted issue of numerous complaints and hardships. First, we are double tasked. We are deploying to do jobs that have nothing to do with the traditional AF CE mission. Granted, construction is

construction, but it's still a separate mission. Then when we return, we have to support the traditional "planes in the air, bombs on target" while the non CE leadership gets disgruntled when we say the "huah" which has been so ingrained into our contingency attitude. I understand our experience with the split/double mission is what makes us so valuable, but I am jealous of the Army despite their lengthy deployments since all they do at home is prepare for down range. (small tangent: Oh yea, most of us are also on single man UTCs. I understand the flexibility this provides for matching taskings to changing requirements, but hell, I never know who I'll be working with down range. What happened to the necessity of unit integrity and a coherent practiced team for a no-shit mission?) We then also have to train and exercise the traditional AF contingency, often immediately before or after deploying (don't get me wrong, I understand the need for both missions, it just sucks). At the same time, we support the home station mission with significantly less people, mentors are all deployed (I honestly have intense respect for the commanders left behind at home station who are still able to run an "entire" squadron and still take the time to mentor CGOs; this is a shout out to [my mentor]), and the mission does not decrease. This turns our 1:1 dwell time into just that, dwell time (yes, we are at our residence), not R&R. True, some CE leadership is good at supporting leave and R&R, but it's hard not to feel guilty leaving behind even fewer people to do the job when there's not enough to begin with. This cycle wreaks havoc on any semblance of a personal life or relationship of any type (not to mention the quality of our home station support capabilities). In the end, we're all going to be worn down and broken by the 10 year point since there's still no end in sight for taskings nor any increase in manpower (I'm hoping high blood pressure qualifies me for a disability retirement check). I do see much empathy and support from CE leadership. However, the rest of AF leadership acknowledges our situation, but I don't see any action on their part to alleviate it. I always get the "I know you're doing great things with very few resources" speech, but I don't see any changes in how they treat the squadrons. Then on even higher levels, there's less support. We are actively supporting the joint fight with our number of joint requirement taskings being greater than AF taskings, all in line with congressional mandates and senior leader direction. Let's face it, CE is Joint. Then why the hell aren't we given the people to support the joint requirement, particularly when we have joint functional doctrine identifying the requirement? All of these factors (which I've honestly just scratched the surface on, and I'm sure everyone in the career field are aware of) are even more scathing when I can see a majority of non CE CGOs working 0800-1600, taking 2 hour lunches, and have no problem completing their duties. Oh yea, they are also active members of the CGOC and other organizations, so they are competitive for quarterly and annual awards, a known key factor for career opportunities/advancement. Meanwhile, I have to decide if I should cut out a few of the meager non-deployed-non-duty hours I have to spend with my wife just to check that box for the best of my career (I really have thought deeply about it). I can't help but to feel like we're the bastard child of the AF (again probably nothing new) (another small tangent; see how many personnel on your deployment outprocessing visits know what CST is). Honestly, the only reasons I'm not separating is because of the current economy and unsureness of a job to support my debt, an integral sense of duty (not necessarily indoctrinated in me by the AF), and I'd just plain feel like an asshole abandoning those I've been working side-by-side with only to make the situation worse for them.

I'm living the 1 to 1 dwell now, along with Joint Basing when I get back. The current tempo doesn't allow for family planning, testing for PE, actually having a dwell at home station to recharge from deployments. I will 100% be separating at the soonest availability. how do you expect CE officers to stay in if they are missing the second Christmas, Anniversaries, Birthdays,

and birth of children in a row. With no end in site, how many more deployments can a Captain expect to stay in for 20 years? 5 to 10 more is not acceptable when you've already missed so much of your family and normal life. Now CE officers are the contractors that are being hired since AF CE can't do the work at home station. So I'll be getting out and not looking back.

There is no such thing as dwell time. We expect to work 16+ hrs/day on deployment, but in garrison we're doing the same thing to pick up the slack for those deployed, RIF'ed, lazy, or incompetent. Kick A1 in the junk to cough up more civilian or military positions. Otherwise, get the cash to expand contracted, long term support (1-2 yrs min per contract) both in garrison and deployed--under a MAJCOM-wide contract, not just another tasker to the SQ's. Extra cash in our pockets would help to keep us around and bring us up to what everyone else in DoD is paying engineers. However, very few people see a bonus as the decision point, but when many are sitting on the fence it sways opinion long enough to sign the contract. The CEG is a great idea and it will help, but it's not enough. A7 has allowed A1 and our zipper-suited sun god leadership to cut our manning so deep I seriously doubt that we could support a major theater war. Large scale requirements have to be canned or manning has to increase. The pace I'm maintaining to keep the mission going is physically damaging my life, my marriage, my future, and my overall ability to give a damn about wearing these pajamas any more. Also, the lack of officers is leading to more less-than-effective officers rising to senior leadership. Transformation? Show me! Nothing we've done has transformed the issues we face, we just tackle them differently.

The majority of senior leaders, such as projected and current Sq/CC, in the 32E career field are out of touch with personnel issues. Simply put, many neglect to take care of their people. Most, if not all, are desperately trying to get promoted, do not take care about the folks/leaders underneath them, have no time for mentoring nor do they care, and are extreme micromanagers. 32E senior leaders have also lost touch with what it means to be a Base Civil Engineer. Too much emphasis is placed on pleasing Wg Leadership instead of doing the "right" and "morale" path.

Air Force life as a Civil Engineer has its ups and down. There are some great things associated with it, however, the ones that stick to me are the negatives about this AFSC. The push for "doing more work with less people" is not cutting it at all. The work load is extraneous and increases exponentially as you progress in rank. You have young CGO's placed in job positions that exceed their work load capacity. We can only do so much work in so much time, and because of that we are obligated to put in more hours at our homes. Great experience, yes, however, quality of life is being affected very early in their careers. Furthermore, the biggest contributor to most engineers leaving at their tenure is the deployment cycle. The dwell ratio is forever increasing because the demands for engineers keep increasing in the field. Families are also being affected and this is a crucial part of the officers life. Who wants to have a life where you are constantly away from your family, and have a high work load that is not recognized or compensated for. Our quality of life is practically getting neglected. Lastly, the credentials that we have as engineers help us gain the confidence in the civilian world. Engineers are needed, no doubt about it. The military as well as the civilian force needs us and the option to get out is great for most engineers. The pay may be less, however, the life style is a whole lot better than the military. The benefits are great along with other perks about the military, but some people would gladly trade in their \$\$ for a little more family time, less stress, and a stable/comfortable

life. Bottom line, give me more \$\$ or benefits to make me stay in. The AF is not looking out for its CE brethren.

I don't think the questions really allowed me to express my concerns. Part I: I agree that there is a good chance for promotion (in rank), but not in responsibility (job). My squadron has one non-EOD flight commander position for around 10 CGOs. That said, even those who do poorly get promoted, so what motivation is to work harder for no reward? There is nothing that asks whether I am simply staying in the AF for the benefits despite disliking my current assignment or potential future 'approved' career path. Part II: I want to pursue career broadening (RAS) but feel extremely restricted in having the opportunity to pursue that or any other non-CE duty. This manifests itself in the impression that great things are happening in the AF but CE refuses to let its officers participate if eligible. That makes me want to look for a job that will support me in what I want to do. I volunteered for [a deployment] program because it was pretty much the only viable route to get the foreign language ability that the AF leadership wants its officer corps to possess. By viewing non-CE assignments as "taxes" it ignores the possibility that some of us want to pursue something other than base maintenance for 20 years. Being commissioned out-of-cycle also eliminated me from consideration from any summer moving assignments. Also, regarding #22, continuing to work for CE & AF already requires considerable personal sacrifice, but I can find similar benefits in another federal job, like the State Dept. Part III: I have deployed twice to Al Udeid for 6+ months. I was dissatisfied with my deployment experiences because I was under-utilized downrange both times. I entered the AF because I wanted to make a difference...7+ years in I still haven't had the opportunity. This is another reason why I volunteered for the [deployment]. Part IV: With Civilian job market, I included other Federal jobs, such as doing engineering work for the State Dept. Part V: As for qualifications, I am a couple of classes away from my master's (BAC+) and will complete it this summer before I deploy so I marked masters completed because its more accurate than saying that I only have a Bachelors degree. I have not been able to pass the PE because of deployment requirements & changes that reduced my study time to three weeks. The test is given twice a year and scheduling around deployments or overseas is almost impossible now.

Although, I love the Air Force and truly bleed blue; I am disappointed in the avenue that CE Officer's are required to take to obtain a Master's degree. There simply aren't enough available AFIT slots for Engineer's to receive a Master's degree through the Air Force. Furthermore, due to 38 percent manning and 1 to 1 dwell deployment rates for Company Grade CE Officer's, it is vastly difficult to obtain a Master's degree otherwise, specifically due to long work hours and on deployment it just isn't possible. For example, many times while at home station and not deployed; I've worked better than 12 hour days to support base exercises and while deployed better than 14 hour days to meet wartime mission requirements, thus finding the time for education after duty is a rarity. Therefore, please consider offering more slots available to Engineers to obtain a Master's degree through AFIT or make more time centric options available for them to do so. I've noticed at several bases that Electrical Engineer expertise is vastly needed to mitigate enormous lightning protection, electrical grounding and safety issues; and that many times, the Air Force contracts-out huge projects to resolve these problems, which is largely costly to the government. Therefore, I recommend making available more AFIT Electrical Engineer slots available to CE officer's so that we may train our own in-house to resolve these problems. It will cost the Air Force less than the cost of these huge projects; and in addition, contribute to the growth of our CE Airman.

I really enjoy being in the Air Force. I have no negative feelings toward the CE career field, but there is another career field that I would much rather be in. My intent is to obtain that secondary AFSC, which would pull me out of CE for half of my remaining career. I would say that I have very strong turnover intentions, but they are internal to the Air Force. I have virtually no external turnover intentions to leave the Air Force.

When I questions asked about my feelings toward CE, I meant EOD, EOD deployments, EOD career progression.

I do appreciate that upper leadership has taken some type of notice of the issues at hand with ops tempo and CGOs. I think it is about 3 years too late and the career field should have fought VSP at that time. We are where we are b/c of poor planning and foresight past the immediate future, maybe I am wrong, but from the bottom up we have no idea what leadership is thinking. I would appreciate and feel a whole lot better if upper leadership would show these results to everyone telling us what their plans are and implement the plan. We have no idea what upper leadership is thinking and I feel, and others too, that we are just left on our own to tread water. Some of us sink and some of us will float (barley). What is the plan? How are we going to operate? Does leadership understand their "most precious resource" (people)? I think even the most loyal CE officer feels the need to move on, the trend has only been getting worse, but there has been no plan to make it better. So should I expect it to get worse and worse for the next 15 years? Why would I stay in to know I will miss 1/2 of my kid's lives? We give and give AND give from below, but what is going on up top? The problems might not be able to be solved but being honest with your people will at least let them know you are thinking about them and you care to try to keep them around. Instead we feel like a number, just another person, but our career field officer wise is not that big! I have a major issue with the transparency of deployments and assignments. Why does one officer get 3 deployments to Qatar, UAE, Kuwait while another office gets 3 JET taskings to some of the most dangerous areas we have? Where is the consistency? What is the process? Is there even a process? Why does it feel like it is smoke and mirrors and we just have to deal with it, "you get what you get". There is no incentive to do well, I could be a slug and get a great assignment and I could be #1 CGO in the world and get something I don't even want. I do understand that it is difficult, but we need to understand there is at least a plan in place to make things better. Right now there is no opportunity to do career broadening assignments like ROTC, well that is at least what the assignment officers are programmed to say, unless you do something for us type attitude. So even though I have deployed twice in 4 ½ years spending 380 days deployed (not to mention CSTs and TDYs) I still owe something to CE? I will have to take a real short tour(i.e. Korea, Honduras, Kuwait) 1 year assignments to get what I desire (and again well ignore you have worked your butt off to be a good officer). It is far too secretive and sketchy with what is really available and all the perceived kick backs to the people that play ball. This survey is all good and nice, but the questions were not black and white, so it was difficult to get the point across of how I am really feeling. I think if this trend continues the good officers are going to bail out and the slugs are going to stay, quality of your CGO (then eventually FGOs and BCEs) is going to be much worse than the career field needs to be successful. I want to drive home my main point, I may be wrong about everything I said, it is my perception though and perception IS reality. We need transparency from the top to bottom, what is leadership doing?

The AF and CE in particular needs to decide what attitude/role we want to take on in the future. It seems that the AF and CE is at decision point and is straddling the fence between whether we will become more combat oriented or remain business like. - CE does not offer quality mentorship or leadership development opportunities for it's young CGO's. A majority of the young officer's leadership development is left to themselves. It would be beneficial for young officers who qualify and have the desire to attend leadership schools such as Army RANGER or SAPPER be supported in their endeavors to develop themselves as leaders. - Denial of retraining opportunities due to minimum manning in the career field and homestation bases can be a source frustration. It may not help retention rates for CE but it would help retention rates in the AF to ensure retraining into crit manned career fields is supported.

everybody hates [my base], and for how hard i worked i thought i would have gotten a base that i had asked for. i know everyone else felt the same way in my graduating class at usafa. i understand that not everyone could get base preference, but it seemed that the Air Force didn't even look at our wish list. I think that is what disappointed most people, not the base they got, but the lack of care that went into our selection. Also, i have tried to get my masters and the have not been given the opportunity. i want a real degree, not an environmental management degree. I need to go somewhere other than AFIT if i want to satisfy my educational desires. I feel like sending officers to AFIT checks the box for our masters, but doesn't make us marketable for the private sector. I'm not looking for that, i just want to get a technical CE degree. had i not joined the military i would already be done with my masters, and have had a scholarship to pay for it.

I guess this is the best part of the survey. Our chance to provide honest feedback. My problem with CE is by and large not with deployments. Those of us that want to stay in know what we are signing up for and will deal with the deployments. No one is going to stay in just because a bonus is offered, but it would be a nice incentive for people that are on the fence. This bonus should be in the range of \$15-\$20k per year for 2-4 years. This is to make up for the higher than normal taxes on bonuses. The problem I have with CE is the time in between deployments and what we focus on at home station. I am lucky enough to have an excellent home station job (SABER chief) right now, but many of my peers are not. We have hired too many civilians to take the place of officers and many times we are 'demoted' after a deployment as far as job responsibility goes. The work in garrison is generally boring, not challenging and just kills time until the next deployment. Piling on extra duties does not count. Managing one construction project is not challenging; homework in college took more time than that. Writing 1391s is not challenging. We want to use our engineering and leadership skills on a daily basis, not just deployed. CGOs should be given the opportunity to excel. We are ripe, but we also know quite a bit about using technology, our leadership and building teams to improve things. However, we're not given the opportunity, responsibility or authority to do this at home station. We are no doubt reporting to a civilian that has been sitting in the same cube for 15 years and says, "This is the way we've always done it, so we're not going to try that." Would these civilians survive at a civilian company that with that type of attitude? Not likely. At home station we are told we have to volunteer for this, sign up for that, show up for lunch, take this class and you will make Major with no problem at all. What happened to rewarding people purely based on job performance. Their ability to lead, manage, problem solve and make the tough decisions. The reason we have some suspect leaders right now is because they were focused on doing these extra things instead of becoming true leaders. CE is not setup to offer CGOs any interaction with the shops on a daily basis. Operations is what we need to succeed on any JET tasking. I learned more about pure

leadership on my six month deployment, than I have in 3 years at my home stations. The first deployment is 'learn on the fly' and hope you have good SNCOs that are able to help and guide you. If we worked with them at home station this problem wouldn't occur. Bottom line: the deployments are not sending people packing from the Air Force. It is the lack of responsibility and leadership when we're at home. We joined the Air Force to be leaders, make tough decisions and be challenged on a regular basis and that is what we want to do.

AS much as I love the Air Force and the CE career field. I dont feel as if the senior leaders truly understand what the dynamics are in the squadrons today. Most squadron commanders have been able to skirt the deployments for the most part of their career (no I do not count 1 year remote to Korea a deployment) and therefor dont understand how to properly lead their people. With "Mandatory Fun" events constantly going on, lots of people including myself have become disillusioned. I am away from home enough that i dont want to skip out on a friday night with my family because my CC has determined that going and singing karaoke with the group CC is more important. Even though this may be a singular event, I feel as if it is not that uncommon in other squadrons. As far as deployments go, i dont mind deploying. It is fun, and it gives you a chance to really be a part of the fight. However, what is killing me is that we now have to go to a month of training on the front end. Giving us really only 5 months at home, assuming you only stay 179 and not 200 days. However during those 5 months, 1 month of it is really just plain goofed up because you are trying to decompress and get back to normal living. Leaving only 4 months with family. At which point, 3 of those 4 months are preparing to leave again on the next deployment. While I dont foresee this changing, it would be nice for the AF and CE career field to express that this is truly happening and start giving more time for families when home. We are constantly asked to perform extra duties, stay for non mandatory mandatory events, etc...when in reality all we really want to do is go home and spend time with our families that we get 4 months out of the year to spend quality time with. With how thinly stretched we are right now, why dont we tap into the great resource of developmental engineers? A7C has always said that only engineers can be civil engineers, well we have a few thousand strong workforce of engineers that i am sure would love to get some operational experience. For the most part, 62Es are project managers, and when we are deployed a lot of what we do is project management (i.e. Al Udeid). This could be the perfect fit for our ops tempo. Now i am sure there are a lot of politics and semantics that would need to be hashed out, and i am sure there are lots of things that i may be ignorant to, but on the surface this seems like it could work. When we sign up as Civil Engineers out of college we pretty much sign our names in blood. There is no way out. A friend of mine is actually seperating this year because the career field will not allow him to apply for the JAG program. Now why is the air force willing to let a 6 year captain with deployments to iraq and afghanistan leave the air force? Just boggles my mind. I understand that the career field is stretched thin, but why let a good officer with a proven track record leave all because the career field does not want to swallow their pride and let someone who does not want to be in the career field but stay in the AF leave? Why not make it extremely tough for someone to transfer career fields to ensure they are not just playing the system. This would allow someone who is truly trying to stay in the AF but is just not happy as CE re-train, but would deter the people that are doing it just because they can. There are far to many stories like this of people trying to leave the career field but are shot down before they even get a chance and just seperate from service. I have had three different squadron commanders in my short career and each of them has a different outlook as to what my career path should be. It seems that what one CC seems as beneficiary to me, another sees as a detriment. The career field needs to do a better job at training

its senior members what a young officer should be doing. The pyramid thing is great, but i have not had one commander look at it and say that is what i should be doing. They all feel that they need to live vicariously through me and my fellow CGOs. I know this is a bit of a rant, but sometimes i feel as if we say all of these things but no one cares. There is truly an issue with CE officer retention and i dont feel as if it is going to be a quick fix. We look at all of the other career fields and they are out there leading people from day one, we get stuck in programs working with a bunch of civilians really never getting a chance to lead until we are a major, at which point we are asked to lead 200+ people in CEO. At this point, we have no experience leading people and usually piss off a lot of people during those years as Ops Cheif. Then when we get to the Sq/CC position, we may have led people twice at the base level. This is just not enough base level leadership opportunities. We wonder why we dont get good mentorship from our senior leaders, its because they have no clue how to properly lead their troops. I feel as if we have lost our Warrior Ethos and there needs to be a renewed emphasis on the awesomeness it is to be a CE officer. Build the comroderie within the career field. Emphasize regional competitions where a bunch of bases from around the country get together and compete in say a tent building operation, or a barrier recovery, etc. have everyone get together to have some fun and friendly competition between the bases thank you for your time

One thing which may make me lean towards getting out is VA school benefits. I recently applied to see how much of the 9/11 GI Bill I am eligible for, and if I start attending school after my next assignment, I will receive full benefits even though I was on scholarship throughout college. Also I was not accepted for AFIT but still need to get my masters. Why should I stress myself by taking online classes, while working an 8+ hour day, while also going on deployment when I could just get out and go to school full time and still get my masters fully paid for.

Good to see that the Air Force is taking an interest in its Civil Engineer CGOs. This is a satisfactory survey which reflects an immediate improvement in how I feel about being a part of this organization. I am very curious as to how my repsonses compare to those of my peers and any conclusions that will be drawn from this survey.

I did not consider the 4 "exercises" I participated in while deployed as true exercises, as they were more readiness drills for preparedness, despite being graded. For the time frame given for this survey that would change the "exercises" answer to 2.

The biggest problem I have with the CE career field is the lack of young officer development. At least here at [my base], they just stick new officers in CEP and basically forget about them. We have civilian flight leadership that doesn't care and doesn't teach us anything. We don't get much mentorship from the military leadership because they're so busy, so I've pretty much been biding my time here. Luckily I have a new assignment, so hopefully my perception will change. Unfortunatly for CE and the AF, I'm pretty sure I've determined that I don't want to be a civil engineer, so even if it does get better, this isn't really what I want to do anymore. Also my deployment was an ILO tasking with MNC-I C7 and it was horrible. They Army leadership was awful and there was no work. It was a complete waste of a CE CGO because all I did was sit at my desk for six months. Now I have such a bad taste of deployments that I don't want to deploy again ever.

I enjoy my job in the AF as a CE officer. I love the guys I work with and I absolutely have loved the work we do at deployed locations. The responsibility, respect and trust that we receive in the

AOR and the impact that we can make to further the success of the mission is what makes us awesome. Truly we can do some incredible things and have some great people. We have one of the best career fields in the service. But, as a young officer I see so many problems that will likely never be solved, no matter what rank and influence my fellow officers make and it's frustrating. Almost to the point of departure. In the AF it seems that we, as engineers, will always be an afterthought when it comes to leadership opportunities to operators, even if we are the most qualified. At homestation, lists for our own top priorities like desperately needed infrastructure improvements and quality of life projects will be continue to be tossed aside for half baked pet projects of WG, Numbered AF, and MAJCOM CCs. Our inputs as engineers seem to hold little weight beyond our doors. As a result, we're running like chickens with our heads cut off trying to put out fires because we're not able to execute any of our suggested longterm planning. We need policy and rank to support our expertise if you are serious about needing us as a career field in the AF. I don't want to just be a person telling my guys to do something stupid for the reason of appeasing the desires of a person with higher rank. It makes me sick sometimes, the stupid things that we are told to do. I want to believe in what we're doing and know that we can be leaders who can impact decisions that should fall within our "lane". If not, we might as well become a civilian contracted force. Our guys skills with the emergency and get er done type of jobs is important for the mission, but it is often abused by upper leadership. Anyone with common sense can see the abuses across the spectrum, although seemingly legitimate/harmless, and know it's truly a load of bull. The number of additional duties and tasks takes up a large portion of my time daily. I have untold additional responsibilities that come and go each month, quarter and year that take up timeframes of almost exclusive work ranging from hours to weeks at a time. It is difficult to work real priorities when additional duties like these are ongoing. Finally, my husband is also an officer. We've been active duty for about 2.5 years now, and we've been separated with deployments now for 17 months of that time. We actually asked for deployments so we could be sent around the same time and it didn't work out. We're not upset about being separated and expect it, but people could be smarter about that sort of thing. We want to have kids eventually...Our life doesn't sound like it will ever be conducive to a family, does it? Something's gotta give. We're willing to give more than the average person to make it work, and may consider reserves if active duty doesn't work out for both of us because we believe in what we're doing overseas and care about the guys we work with, but we only have so much we can give. We do have limits. We just hope people will continue to help us to help our fellow CE brethren. Bottom line. I love our people, I'm proud of the work that we accomplish when it is needed the most and I'm most proud of our mission overseas, but we need more respect across the board from others in the AF, especially stateside, otherwise we may all just get sick because of the stupid and leave to find work where we're running full speed for a purpose. We have plenty of things to worry about with marriage and family, and we're willing to sacrifice, so the least we can do as an AF is help people like us know that all the sacrifice is worth it.

I have enjoyed being in the Air Force and while homestation work can be tedious sometimes, I really enjoy the work I do during deployments. Unfortunately the deployment tempo does not work well with my family situation so I will be seperating very shortly.

Whether or not we receive a retention bonus will be the determining factor in my decision to stay in after my committment is over. The stranglehold on cross-training out of CE is what drives a lot of my peers out of the USAF.

I hope that its clear through my survey results that any inclination to leaving the CE career field and the AF in general is a result of purely personal choices. The CE career field and AF has been very good to me, I simply seek another direction and a career path thats more in line with my current interests. I have only been on one deployment so far and it was a great experience. As of now, the high ops tempo for now and that projected into the future does not dissuade me from serving, although i might expect my opinion to change after 3-4 deployments. Thanks for the opportunity for letting us be heard!

Additional contextual factors for spousal opportunities (e.g. work to meet spouse qualifications such as engineering/architecture, other technical jobs) - Additional questions towards incentives may have been helpful (e.g. bonuses, while we do not want to admit it, might assist with retaining officer's with expiring commitments)

It's no secret CE is in high demand in deployed locations- our Ops Tempo has steadily been increasing over the last few years, and will continue to for the foreseeable future. When asking about this pace, the answer has always been "we're working on it" but hasn't shown any improvement. I like the CE career field, but I look in the future if I want to continue at this pace. Even as a Squadron Commander, the BCE is about the most beat up position in the Wing- our budget for facilities and sustainment have also seen a decline, and will continue to do so. With that in mind, if things are bad now for that position they are only going to get worse.

The benefits (housing, gyms, pools, club, etc) offered by the Air Force are more than adequate. My biggest complaint is TRICARE/MDG. At Ramstein appointments are next to impossible to get and the service has been frustrating at best.

Overall satisfied with my job and career but I can see the ops tempo and deployment cycles starting to take a toll on many folks. I think some of this could be relieved with some type of fair share system for deployments but also don't think that type of system will ever work based on quality of personnel and requests to constantly tap/depend on top performers. I have always had a lifer mentality but my service is third on my list of priorities. I am driven to work hard and long hours but have vaguely considered getting out if my wife cannot sustain the tempo. A wake-up call was when she told me I was failing at my marriage, mainly because I was focusing too much time at work. Money and job opportunities will always be big factors for people to get out or stay in but I think the deployment ops tempo is the biggest factor I hear talked about among peers. Good luck with the research.

BLUF: 1) Fix CE officer education, 2) Fix junior officer ignorance of what CE commanders do and 3)Fix the misery and discontent (to the extent possible) that comes with being a CE commander (or at least find out where it is coming from). Of the questions that were asked, none addressed the education requirements of the CE career field. Right now, many of us are working on MBAs and other higher degree programs that are "check the box", "play the game" efforts. Because of the status of our PME, our preparation is not adequate to address our basic needs. The nature of our taskings and the duties we perform while deployed (which, by and large, are more satisfying than homestation duties) demand that we be no-kidding engineers. The need for civil engineer officer "CDCs" and a robust and meaningful PME course curriculum is very real. Simply put: Engineering know-how is not something you can warehouse and expect to work flawlessly when you dust it off for a Silver Flag exercise or two. Our PME should be structured such that after taking the full MANDATED course load, taking the PE is a matter of showing up

to the test. We are performing well on our deployments, but the hard fact is that it is because of our native intelligence and individual ability to adapt rather than ANY preparation given to us for our duties. As for the number of CE officers that are leaving before they become operations flight chief or squadron commander, the issue is two-fold: We (junior officers) don't know what they really do and when we see them in action, they are usually getting a dressing-down from someone at the wing level. It is seldom that we have a happy, well-rested and content CE squadron commander. Why this is so is a matter for the people that provide the support structure for CE commanders need to address candidly and soon or the "bathtub" on the manning charts we keep circulating will only deepen. No one, given the current climate is willing to say, "I am glad that my CE commander tour is only two years because..." Recap: 1) Fix CE education 2) Fix junior officer ignorance of what CE commanders do 3) Fix the misery and discontent (to the extent possible) that comes with being a CE commander.

Two improvements that I would recommend to help retention: -Improve the way shortfalls on deployment are handled and retasked. My last deployment and the one that I was spun up for (which got diverted to some other unfortunate O-3) were short notice (two-weeks). Both were due to someone dropping off last minute. I enjoy my deployments but it would help to have time to get ready AND spend a few days with the family. My current deployment which I should be leaving for in two weeks fortunately gave me a month to get ready and burn some leave. -Return some of the RFO positions back to the Officers. My base only has two flight CC positions that are for Officers, Ops and EOD. There are few opportunities for a Captain within this squadron outside of being a flight deputy or an action officer/exec.

I'm single, but I answered some of the questions concerning family based off my family in the US (I'm overseas.) In terms of my retention, I have mixed feelings. I always promised myself I would not leave the Air Force without my M.E. and my P.E. I'm a year from graduating with my Master's and I'll be eligible to test for the P.E. this spring. As of right now, I have no reason to leave the Air Force after I reach those two goals; I've been really fortunate with assignments and deployments. If that were to change, or if I got married and had a family, I think my views on staying with the Air Force would be different. Also, I don't foresee doing 20 years as a CE officer; I don't think I have the patience to deal with some of the day to day issues I see CE squadron commanders deal with.

As it stands right now, I am leaning towards staying in the AF until I retire, with that being said if I separated either now or five years from now would be based solely upon how much me being gone is affecting my family, during the past two years I have only been home for 10months. The Air Force has provided me a great skill set that can be useful in either civilian or military life. Talking with some of my NCOs over here, they are of the same opinion of their overarching reason if they separated would be based upon family concerns. After attending SOS this summer and listening to my instructors, guest speakers, and fellow flight members, you can tell that there is a big difference in mindset of Airmen that are in career fields that deploy continuously and those who don't or not on a regular occurrence. Anyone of those members that are part of high ops tempo career fields (CE, SFS, CONS) the overarching reason for them to separate would be family concerns, military job comes first but when it starts affecting family people are thinking twice. Listening to some of the senior leaders at SOS and how they approach the academic curriculum also makes it apparent that the focus of the Air Force is not with the Airmen that are on the ground making the biggest sacrifices put with pilots, now with that said yes I am in the

Air Force whose mission is to fly but people get narrow minded when talking about the support personnel and the how it ties into the goal of the Air Force. I know that there are a lot of people who are much smarter than me who are making the best decisions for the future of the Air Force from information at hand right now. However, when you hear of the next greatest plane/weapon system it never discusses how that affects the people supporting the plane.

The problem is definitely dwell time and home station jobs. A 1:1 dwell will force me to get out due to family commitments; especially with my wife in a 1:1 career field as well and she'll get a bonus to stay in. Home station jobs: Most home station jobs appear boring at best. Project programming is quite important but with limited funding available its not a very fulfilling job. The jobs that would give officers breadth and a desire to be in CE would normally be in ops; and none appear available for young officers.

It seems that the Air force is very Pilot/Airframe focused in their decisions when in reality the majority of deployments and operations we conduct are in support of the army with airmen on the ground. Since airmen are being used as soldiers, why don't we train as soldiers? More firearms, small unit tactics, convoy and land navigation should be incorporated into training. Not some worthless CBTs either, real hands on weapons training more than the minimum once a year. You cannot put someone in a situation where they may have to fire a weapon to defend themselves and they have only shot 100 rounds in their entire life.

My greatest concern about making the AF a career is opportunities for my fiancée. She is a biomedical engineer that has a small job market and the CE career field does not take that into account (even when we marry). If I had to choose between her having to give up any possibility with a job or the AF, I would have to give up the AF.

It seems like there is very little information on pursuing higher education. I know that I need to pursue it, but I don't quite know how, or in what direction. Should I hold out for an AFIT spot, even though they do not offer any civil specific MBAs? Should I take classes on my own, in a less technical degree? Will one hurt me or help me over another? What is the AF looking for in its junior officer's in this respect? Also, in school they always mentioned the importance of being a PE, but since I arrived, there is no talk of pursuing it. I take pride in being an engineer, but I get the feeling that if I want to progress as one, I need to take all the steps without guidance. Thank you.

I am at [school] as an instructor now, which is what leads to several "satisfied" answers. However, were I out in the operational CE career field, I feel almost certain my satisfaction with the frequency of deployments would be considerably reduced. Taking a "break" by instructing is the only reason I'm not already out of the Air Force.

There are a lot of things I love about being a CE officer, but there are four major things that make me wonder if it's the career for me going down the road. The first is that I don't get to use my technical background (mechanical engineering) anywhere near enough-project management is related to engineering, but not engineering. The second is that as an officer I expected to be in charge of people, and that is not the case. One of those two would have sated my professional goals. Additionally I think it may be difficult to settle down and have a family as a member of the AF, and finally I'd love to get involved in research down the line (not research project management, like a 62E, but real research). That said I do think we make an important impact on

the mission, and while the work isn't a perfect fit for me I enjoy many aspects of it - and it's certainly the best fit for me in the Air Force, with it's mix of technical work and immediate impact in deployed locations. There are certainly little things that get to me as well, like the amount of paperwork, some of the organizational aspects, and the insistence on special duties being as/more important than learning the job and doing it well, but overall it's a great job. I just don't think it's the job for me.

CGO attitude is directly related to leadership. I have consistently been satisfied with my job if there is good leadership. Unfortunately, that is not always the case in the CE career field. Next, dwell times have to be increased if you want to retain CGO's. I have been deployed 3 times since 2005 plus a short tour to [a remote location]. That is too much time gone from your family. It creates stress and family issues. The senior leaders in the CE career field for the most part don't understand this burden. Promote the right people/place correct people in leadership positions, it will significantly improve the morale of CGO's. Second, 1 deployment every 4 years is the right number. It's enough to develop a family life. Third, give the CGO's back at home station real jobs. Being exec, extra duties, etc., creates untrained personnel for deployments. We need better training for the mission we are tackling. Examples are more pavements class, electrical, and structural classes.

I am currently satisfied with my home station job, pay, and benefits. What tips the scales for me is that if I stay in, I am basically volunteering to miss half of my children's life until I can retire. I have been fortunate with my deployment schedule thus far but I have seen many classmates receive new taskings while they are still deployed. I feel grateful to the AF for what they have provided me thus far but I feel committed only to what we agreed to in my service commitment.

if #3 refers to only on base facilities the answer should be VERY DISSATISFIED. I never attend any functions on base at the clubs as they are not worth my time. The only on base facility I routinely use is the gym. I am there 6 to 7 days a week. Off base recreational facilities are somewhat dissatisfied, however for a town with a population of 120-130k? I am not surprised.

I strongly feel that the deployment cycles make it difficult to accomplish work when not deployed. Due to the training that one must attend before deploying, and the time off of work and leave and such after a deployment, I feel that more time should be given at home to actually accomplish work. I am considering leaving the Air Force after my commitment is up. This is due to some flexibility in where I live, and with the Air Force's lack of concern about trying to work with the CGO's on assignments and duty locations.

Cmt #1: I understand my lack of deployments is partly due to 1) mission reqmts back at home-station (primary) (highest ranking O outside of BCE - unit had Maj and Capt already deployed, my expertise was needed at HS unit more than deployed location) and 2) supervisors sending someone else as someone volunteered so I could stay home with the family for a key family event (secondary) (for example, marrying my wife, birth of first child). Cmt #2: Very annoyed that it's not possible or extremely difficult to figure out why a CGO can not get joint credit for a 1-yr deployment working for the Army. Cmt #3: Highly believe it was a huge foul for the AF to deploy 2Lts to Iraq to work for USACE - the one individual I know that did it performed excellently, but his prior experience did not prepare him for that at all. Cmt #4: 2 or 1Lts should not have been deployed to Iraq to work at the FOBs without any higher ranking, Maj or above within CE career field, as they supervisor - very bad move to leave them as the CE leaders of

enlisted troops that may or may not have had a prior strong deployment experience. Cmt #5: If we've got a bath-tub of CE ranks, why hasn't a critical retention bonus been pushed? Cmt #6: Unmasking master's degree for Maj promotion selection I believe was the wrong move as our dwell for deployments is so high & our demand of time at work working is also so high (why, due to downsizing we are doing the job of multiple Os and sometimes multiple enlisted as well, we downsized them too). Cmt #7: AF CE Os I believe are lacking in basic engineering skills that they learned in college and lost while on AD prior to usage during deployment. Prior to deployment, or since we are supposed to be deployable within XX hrs, requiring mandatory engineering basics training regarding airfields and support base facilities should be a must at varying points throughout our career. Simplified Facilities Design is a start, but not a catch-all. Cmt #8: BCE training on how to mentor their CE Os is necessary. Some are really good at this, others are not and get caught up with the demands of their leadership and neglect mentoring their future replacements. Each BCE has prior experiences that their Os can learn from (may it be from experiences on deployments at MAJCOM, at the Pentagon, etc...). Sub-cmt: OPR/EPR/Instruction writing is important and needs to be stressed. Cmt #8: CE Os seem to be loosing their competitive edge. Cmt #9: AF supported school with a 365 follow-on is a great idea. Cmt #10: Elimination of JET, IA, ILO (whatever you call it) to support surplus needed to due Army taskings is a great idea - AF team integrity down to the unit deploying is key. Don't get me wrong, my joint/IA experience was fairly rewarding, but that's because of the people that made it so within MNSTC-I J7 - other J Staffs in MNSTC-I I understand where at their services throats constantly. Cmt #11: Awareness of job positions is extremely lacking at times. Understanding what types of positions are out there for CE Os outside of the standard base-level CE (in what, there are unique situations here at times), Ops Flt/CC, MAJCOM Staffer and BCE. Cmt #12: Although a huge opportunity for a Prime BEEF'er to deploy in support of AFCEE, i.e. sitting in an AFCEE deployment slot - I believe this is a foul. AFCEE in CONUS should deploy their staff to support their efforts in the AOR, otherwise you end up with folks on the front-line that don't know the AFCEE way any better than their deployed base-level CE Os do - 1 to 2 weeks for crash course training seems like a bandaid fix instead of the right answer.

Numbers seem odd after thinking about them, but as an overall general summary of my thoughts at the moment: - I understand for the most part that we could be making a whole lot more money doing engineering work on the outside, however I enjoy working in the military on base. We're not rich, but we are taken care of, and I enjoy working with the people that we do (as well as not being tied down to a time card). - I strongly wish to do a 20 year career in the Air Force, however the deployment tempo will determine how long I actually stay in. I can't imagine doing 6 months a year downrange for the next 18 years, as I worry that it would be very difficult to start a family, as well as maintain one, under those circumstances. I actually enjoyed my deployment, and would not be opposed to going again, just not at the current tempo (I'm sure this is a common feeling that you receive a lot) - The largest factors influencing my decision to stay in the Air Force (and CE career field) are the travel options (I enjoy PCSing every 2 to 3 years, and look forward to my next two upcoming ones), avenues for getting a Master's Degree, and the type of work we do (I enjoy the flight commander and project management aspect more than the work I would be doing as a civilian design engineer).

I think the uproar over ops tempo is blown out of proportion, and that people need to recognize that they are in the military, that they signed up to be part of something bigger than themselves, and that demands on them are going to be high at times. They need to also recognize the benefits

that come with military service, and understand that Civil Engineer leaders are doing their best to look out for the interests of engineers. This is a great time to be part of the Air Force, and Civil Engineering in particular.

Virtually the ONLY factor that will determine whether or not I stay in the Air Force is the frequency/length of deployments. I currently feel like deploying 6-months out of 2-2.5 years is about my threshold. I am looking for a careerfield where that is possible. If I can't find one, there is a good possibility that I will look for other work. I would prefer to stay in Civil Engineering and although I am committed to my work, my family is more important to me and I would choose what's best for my family over what I prefer. To keep people like me in CE, I think the Careerfield needs to designate two tracks: a 1-1 Deployable Track, and a 1-4 Deployable Track. The 1-1 Track should be eligible for a significant bonus. There should be an 'Open Period' each year where you can change tracks based on your personal/family situation. Once you sign on to the 1-1 Track and take the bonus, you commit to a period of maybe 3 years. I understand people will say 'you can't do this' (because it has never been done before). But if CE wants to avoid losing a significant amount of its officers, something significant like this needs to be done. Maybe it could be done under an 'experimental' program to avoid all the red tape required for significant long-reaching personnel changes. Good luck!

Since I started Active Duty, CE has changed AEF cycles twice in 2 years. From 4 months deployed and 16 months home, to 6 months deployed and 12 months home, to 6 months deployed (plus pre-deployment specific training) and 6 months home. The change is not the issue but the rate of change is of big concern as planning for anything (Family, Masters, . . .) all becomes tentative. When I talk to senior CE officers they all say they have never seen the Tempo decrease, it has always increased due to the reduction of manning and the increased work load. Additionally, all the Lt Cols that I have talked to are still in because they got a re-enlistment bonus. Any good CE CGO could tell you the Air Force benefits and pay grades are comparable to the private sector and if they can't they are obviously career CE officers because they haven't explored other options (so they are not the target audience). These comparable salaries and benefits make the choice to stay or separate equally attractive. Seeing the manning levels for Captains (62%) and the Majors promotion rates (92%) and in the next 5 years there won't be enough Lt Cols to fill all the BCE slots makes it easy to deduce that making rank won't be the future issue but the work load and expectation will be the controlling factor. If expectations keep changing, the decision to stay or separate will become clear. If the current unwritten expectation continues (to do the work of the next rank above you, example, when you deploy you often accept a rank lower than what is required to fill a task) then that needs to be brought up front and clearly defined, or clarify each tasking with line remarks, as in start having specific rank associated with each deployment tasking. Clear expectations of what is expected will help CE CGO turnover decisions. Re-enlistment bonuses will help persuade that choice to stay in a career field Bottom line: CE CGOs are at least owed a clear expectation, need some sort of incentive to stay in, or Mother Air Force needs to reduce tasking to allow for stability and predictability.

1.5 children => 1 and my wife is pregnant We live on base in adequate, albeit old housing at [my base] My son is not school age yet (18 months) I don't feel like much that I have done in the AF is very CE specific yet, mostly just paperwork pushing that is somewhat CE, but could just as easily be tailored to any other AFSC. I would like to attain my PE, but I have no experience in actual engineering to count toward the requirements. I have so far done nothing engineering

related, programming and additional duties don't really count. If deployment tempo doesn't slow down, it may contribute to my desire to separate, simply because I want to spend more than half the year with my family. 6 months out of every year away from home is no way to raise children.

Current economy, benefits in the civilian market and healthcare systems makes as well as the 6 month notice requirement makes it hard to seek other opportunities. Cross training for officers seems very hard. There aren't many advocates for someone who isn't satisfied with the CE career field. A 6 month test program would be great. Say a 62 officer wanted to try CE for 6 months to see what it's like, or a CE guy try 62 or AMX. Putting people where they want to be and giving them an opportunity to feel comfortable in those choices can only benefit the AF and the mission.

I currently have no ADSC left. Because of this I listen to all job opportunities. If CE had a bonus, I would most likely take it now and it would keep me in for a few more years just for the fact I would stop entertaining offers since it would come with an ADSC. I'm happy with the Air Force/CE, but I'd be a fool not to listen to what else is out there and also since the Air Force/CE is doing nothing to lock me up for the future.

I have a few comments and suggestions regarding several different aspects of the CE career field and the AF in general. The first one is a suggestion, especially for the CE career field where all officers are engineers. One of the things we know going into the career field in the AF is that coming out with 4 yrs of experience and an engineering degree we are good perspectives for civilian engineering firms. One of the things a lot of my friends are running into is that companies want experience from new engineers to get a position with them which most don't have straight out of college. With our leadership/management training, discipline, and engineering expertise high offers from separating engineers are almost guaranteed in a good economy. My suggestion to try to keep people to stay would be to provide statistics of how much we get paid in the military (all benefits, allowances, education, insurance costs, loans, etc) vs the civilian world base pay (where everything is paid out of pocket) for someone with the same years of experience. Another good statistic would be to show the level of management/leadership someone would have in either scenario. If we believe it is more beneficial to stay in it might tip the scale when the time comes to decide. My second observation that I have come across, while being deployed and working with the Army is that CGO's in the Army make rank a lot faster than we do. 1.5 yrs for 1st Lt + another 1.5 yrs to Capt. If the AF finds it is losing Capts and doesn't have enough to fill slots there is always the option that after 3 yrs they could have produced a Capt which means that someone with a 4 or 5 yr commitment will be a Capt for 1 or 2 yrs, which is probably a different experience than being a Lt and then getting out to find something better than what they have experienced thus far. The next comment is on something that is more AF wide. It has to do with the ton of emails that I get every couple months telling me about awards for different select groups of people. For example there might be a Hispanic American, or an African American, or Asian American achievement award or something to that effect. Now I'm not racist or anything because I like pretty much everyone until you give me a reason not to, but it seems that simply because someone is of a different ethnic background they are entitled to more awards and recognition opportunities than say a European American who might work harder. The military is supposed to offer a level playing field and not be biased towards any group, but it seems that it has given into the constant cries for someone to be more special than someone else simply because of their ethnic or economic background. My example is that my dad came from a poor

Italian family in New York, but he worked his butt off becoming educated and researched all of the job opportunities that he could in order to get a better life. Is that any different than anyone else pursuing the American dream, to simply say here's an additional chance at an award because we feel sorry for you? Anyway that's all that has been on my mind recently, hope this offers some insight that might be useful.

This is a very good survey, the main factor in determining whether or not I would separate from the Air Force after my commitment would be the deployment frequency and if I was married/had children by then. If I was still single, it would be a more difficult decision because I would really only be affecting my life and not my family's. Another factor would be the job market at the time of possible separation. If a better opportunity (i.e. much more money) came along in a nice area, for example, I probably would not hesitate to take that. However, I do like my work now and look forward to what I can possibly do in the future in the Air Force.

Part 1: Question 5 is slightly misleading because doing a good job at work has almost nothing to do with promotion rates. As long as you haven't gotten a DUI or had extra-marital affairs Major is guaranteed. Part 1: Questions 15, 17, 19, 21 and 23 reflect that I have no problem staying longer than the 11 hours I already put in every day, but would end up sleeping on the couch... Section V, Question 2: The AF gives me plenty of opportunity to take leave and vacation, but my job requirements do not allow me to take advantage of those opportunities (reference the 65+ days of leave...).

I feel that the civil engineer career field underutilizes their personnel, especially lieutenants. There are a multitude of educational opportunities for young engineers at base level, but most of them are being accomplished by civilians. Many of these civilians do not seem to have the best interest of the military personnel in mind. The career field would be better off if they would place a mid-senior level captain as a deputy engineering flight chief to look out for the best interests of the military personnel. There are good jobs available at the base level for military personnel, but these jobs have been made bad by the civilians in charge of the squadrons. The length of deployments is a considerable problem. There are those who deployed for just over 180 days who receive short tour credit, where others who deploy for just under 180 days do not. I am highly susceptible to being non-volunteered for a 365-day TDY based on receiving no short tour credit for my 178 day deployment.

I like the idea of a bonus. Let's do that for those who stay past their service commitment.

I think there are fundamental changes needed throughout the CE career field. Expeditionary and Garrison demands are huge and something must be done to alleviate the stress placed on all levels (not just CGOs). I'm not convinced a bonus will be effective (although I'd love to get one), but instead a change in the structure and mentality of the force to focus on our real mission objective: supporting the warfighter.

My primary reason for wanting to separate when my commitment is up is that I do not want to have children while I am on active duty (especially since my significant other is also active duty).

Short tours were not considered in the Ops tempo section, I have only one deployment but, I am 277 days into a short tour.

The Ops Tempo for CE officers is very demanding. It seems like the workload for a CE officer is increasing and the number of people available is decreasing. Also deployments are brutal. I feel like I am only coming home to make a pit stop before back out the door. Jul 07 - Jan 08 Iraq (ILO), Jun 08 - Jun 09 Korea (instead of going back to Iraq in Jun 08), and now Nov 10 - May 11 Afghanistan (PRT). I am lucky that I will have only deployed twice in 6 years.

There are several reasons that I plan to separate in the next year to two years. I am married to another military member. My husband is a C-17 pilot. We have been apart over 1/2 of our marriage (married almost four years) and with both of our deployment rates, it will not improve any time soon. (GO1B did not make it any easier when I got to see my husband while he was on a two day trip and we had to spend time in the office instead of being able to talk privately in my room. Even prisoners get visitors!) Honestly, I love the Air Force and would love to make it a career, but I want to have kids in the future and our lifestyles are not conducive to a family. Not only are we deployed a lot, but we also work long days when we are at homestation. There are circumstances where I feel that working late is appropriate, but on a regular basis working long hours to make up for having so many people deployed? That is frustrating and wearing down our troops especially when they are spending over half the year deployed away from their family. In regards to the survey, some of the questions are deceiving. For many of us, it is not a matter of loving the Air Force or loyalty why we plan to separate. It is a matter of our family being neglected and being overworked. Working 12 hour days on a regular basis at garrison when you are expected to deploy every 6 months is unacceptable. Especially when often times it is doing additional duties or a special assignment (eg. a generals visit) on top of a mission that is undermanned from deployments from the get-go! Also, in reference to one of the questions, it is not the rules that make doing a good job difficult, it is the amount of jobs and additional duties that are put on CGOs and they are all expected to be done to the highest standard. If CGOs have 3-5 additional duties (which I would say the majority of CGOs have), how can they be expected to perform in their primary duty?

OPSTEMPO at home is worse than deployed - I PCS'd here in time for a UCI, then deployed for 190 days, then returned home to begin ORI prep. Odds are high that I will deploy before the ORI arrives, but that won't stop me from being a key participant in OREs. This OPSTEMPO makes it impossible to accomplish long-range personal goals: make/raise children, schedule the PE exam, formal education, etc. There is no balance in duty requirements and family requirements. The PE exam is particularly problematic because of the long lead time to register. I currently have 73.5 days of leave and 18.5 days of use or loose. With the current OPSTEMPO, I will be lucky to use 10 days before I deploy again. In a 1:1 dwell cycle, to maintain the same number of leave days, members must take 5 days each month? no supervisor will allow a member to be gone for one week each month. The scenario gets worse if CST is required. Unit commanders have continued to get worse. They consistently cannot articulate unit goals or priorities. Everything is a super-hot task, until the next task comes along and then the first task is forgotten. Supervisors at all levels consistently fail to provide ANY feedback to subordinate members. I have received one mid-term feedback during my 8 years; how good/bad am I doing? What areas do I need to show improvement? Unit commanders are clearly focused on things other than developing their replacements; in many cases it appears to be a me-first mentality coupled with the belief that everything's fine. [the AFCE's] "high touch" mentoring theory sounds good, but unit commanders won't do it. The promotion questions in this survey aren't quite accurate. Every remaining member of my year group that stays in the Air Force will be promoted to O-5 - the

RIF & separation bonuses cut too deep. The Air Force isn't limiting opportunities to members who those who "should" be tomorrow's leaders, the Air Force is just giving it away and hoping for the best. The Air Force has sold engineers to the Army for goodwill (how's that goodwill working out for the AF?). Why is the AF supporting an organization that refuses to support itself? The Army has been not supporting themselves for eight years and there has been no visible change in the Engineer branch. When the mission support officer ops tempo reduces in 5-10 years (respectfully disagree with AFCENT/CC based on generally accepted COIN requirements and the Army's inability to support their own forces), what will save home station AF CE positions from being converted to MAJCOM/CC CAG positions because we proved we can execute the home station mission with less than 50% manning? Probably the most demoralizing issue is that CE's senior leaders don't appear to realize what is happening in the CGO career field. The mission continues but at what cost today? What are the second and third order effects from today's bill? Why do I want to lead (or even be a part of) a CE organization? We're getting our teeth kicked in every day by wing commanders who won't prioritize efforts of the wing and CE commanders who won't stand up for their organization.

In general, my wife and I have had poor service at Air Force medical centers. The doctors have often had trouble diagnosing our problems when we've been sick. Over the last few years, my wife has had trouble with getting pregnant, and the doctors she has seen were not only unhelpful but also unsympathetic. I've also watched many friends try to have injuries treated, and they have not received an acceptable level of care.

The current CE Ops Tempo is the biggest contributing factor affecting career satisfaction. While many deployments are professionally rewarding, some are quite evidently the result of mission creep. The greatest frustration is the frequency of deployments detracts from in-garrison job satisfaction, continuing education opportunities, and meaningful family development.

I love being a CE officer. There is great job satisfaction and a sense of pride in the career field and the job that we do. I feel we bring more to the table than any other air force officer and as a result are in very high demand. In my opinion, there are only 3 negatives to being an air force CE officer. 1) long duty hours 2) Frequent Deployments 3) Not paid enough compared to the private sector (we get the same pay as an FSS & SFS officer. that makes no sense at all!!). These three negatives are enough to push great CE officers that love the career field out of the air force. Why do lawyers, doctors, and pilots get extra pay and not CE officers? Engineering is a specific professional career that requires a challenging degree and certifications just like law and medicine and should be paid as such.

I am also prior service in a different branch, which is something that was not covered by your demographic questions. My total amount of service is much higher than your question regarding total AF time, so that gives me different options. Something to consider, would be to find out if LRS is doing something similar and cross check the numbers for these to AF career fields. I am friends with several LRS Officers and we have talked about both AF career fields and their deployment/retention issues. There are quite a few prior service LRS Officers and I have quite a few that retired after 10 years of commissioned service. For career options, I would like to see more non-flying personnel in charge of bases that have flying missions and in other "sacred" positions. Currently, the AF has what appears to be a glass ceiling for non-flying personnel. My belief is that there are a lot of qualified officers, and sometimes better, who can command a flying mission base. This will require major change at levels far above CE. AF CE officers need

to be constantly placed in leadership positions starting at second lieutenant. The AF as a whole does a great disservice to its officer corps by not placing officers in leadership positions as soon as they enter the AF. The Marines and Army place their officers in positions of responsibility and authority as soon as they enter and they constantly move and change in these positions so that they can polish their leadership skills. The AF does not do this until an officer has become a major or higher in rank. At this point it is too late and the officer has not been properly prepared, through experience, to be a more effective leader. Right now a lot of CE officers are learning this through RFF/ILO/JET missions. Surveys like this can be good, but I wonder if they are too late and some need to be done that address issues with commanders at higher levels than squadrons and groups. I think this is especially needed in light of the spate of commanders fired over the past two years, the number of high ranking AF officers prosecuted for their actions, and with AF officers being fired from their deployed tasking.

I am overall very happy with the Air Force and CE. My main and only issue is not with deployments but with the overall imbalance of deployments. There are many officers that have been on 4,5,6 deployments. There are also many officers that have only gone on 0 or 1 deployment. I believe the Air Force can increase retention and the morale of its CE officers if they balance out the amount of deployments. Many officers don't have a problem with deploying but they feel cheated when they go on numerous deployments and some other officers don't go on any or are exempt due to teaching jobs, or some special duty which exempts them from deploying. I feel we should screen our officers before we allow them to enter into these jobs. If an officer has deployed very little they should not be allowed to go teach and avoid taskings. At the same time if an officer has deployed more than his fair share he or she should be allowed to go into these non-deployable jobs. It seems the fair thing to do. It is not as big an impact on me because I will stay in past 20 years anyway but it will save a lot of people on the fence.

I used to love being in the CE career field. There is no way someone could convince me to leave. However, the past year has really shown me that our senior leaders (not necessarily our CE leaders) are completely removed from reality. I returned from a deployment from Afghanistan at the end of December. When I returned, I was told I was being non-vol'd to Iraq for a 365 in March. Although I had 2 months of time between my return, and my next departure, my leaders thought it best that I attend SOS. While at SOS I received a call from the JET tasking people (2nd AF) that I was to report early for CST because the leaders in the field poorly planned for the overlap and needed us earlier. I had to leave SOS early to in-process from Afghanistan, (which I hadn't done yet) and out-process for Iraq. Not once did the JET tasking people try to work with me. I explained that I had been gone for over 8 months and would literally be home for 8 days before I would head out again on a 365. No one cared. It was all about "team integrity" and getting to Ft Polk to sit around for 2 months away from our families. The JET tasking people (2nd AF, 602nd...) and our overall AF leadership have no idea how much our families are getting ripped apart by poor planning and increased ops tempos. More civil engineers are getting out, and less people are filling all the empty taskings. The best CE CGOs I know have already or are planning to separate. Why would I stay? I am getting ready to leave on my 5th deployment in 6 years (and I did an 18-month Master's degree at AFIT!) As soon as my commitment is up from attending AFIT, I am out, unless radical changes occur (regardless of job opportunities outside).

The 'promise' of a deployment tasking without actually getting one is about as bad as actually getting one - when it comes to planning vacations, trips to the States, and advanced degrees. At

this point, home station ops tempo is my primary concern. The '300' times I've worked past regular duty hours is a very rough guess. I think I can count the number of times I've gotten home from work a reasonable hour on two hands, max. While the jobs I've had are rewarding - with the exception of never-ending additional duties - and I'm fully committed to excellence in mission execution, I have no interest in shredding my family life for the sake of the mission down the road. The AF's reputation for this interest in its people is one of the several things that initially attracted me to service with this branch. I've appreciated the experiences I've had and the folks I've been privileged to serve with but it's the time it takes to accomplish the great things our people are doing that might edge me out. Thanks for your concern and the steps being taken to address ours.

I plan to stay with the CE as long as it's still fun, and I have enjoyed my short time in the service so far. However, I don't feel like the Air Force is some kind of family, to which I belong. I see this as a job, and not much more than that, and I highly doubt that will ever change.

I am extremely satisfied with the benefits I've received in the AF. They are unmatched and provide an excellent platform for 32E's to start their lives. That said, the AF's requirement to be a good officer will always supersede it's requirement to be a good engineer. As such we get juggled around so often that it's difficult to ever master any aspect of engineering. Furthermore, I believe it would be really difficult to get a job as an engineer after 20 years of being a "jack of all trades" and touting a resume broken up into 2 or 3 year stints with 2 or 3 jobs in each (Env O, Programmer, Readiness O, AFIT Instructor, War College Student, Asset Mgmt Staff???) Case in point, a fellow 32E graduated with a degree in Elec Eng and hasn't touched it since. In fact, he spent the last deployment running convoys. If he'd been injured in one of those convoys and had to leave the AF, what would his resume look like? The AF's partiality to officers with multiple jobs was further proven in the career of an outstanding fellow 32E who was passed over for staff assignment ostensibly because he didn't have enough jobs in his DVB. Honestly, we're not guaranteed any more job security in the AF than on the outside(especially with Force Shaping, Medical separation, etc) and the things that make you competitive in the AF seem to hamper your marketability on the outside. In truth, pursuing a career in the AF is a great decision for someone who is committed to being an officer, not necessarily an engineer, for 20+ years. However, for those thinking past their retirement and evaluating how those 20+ years will translate into an engineering career, it just doesn't add up.

The pace is tolerable as long as you are single but if i had a family i would be gone

Please fix the civilian hiring process. I have seen too often this process hurting USAF Civil Engineer capabilities due to the large amount of time it takes to hire a civilian. It seems as though sub-processes have been added year after year because someone thought it was a good idea at the time. This civilian hiring process requires a fresh set of eyes from people who are willing to ask if each sub-process is absolutely necessary. Thank you.

I am currently deployed and have not been back in the squadron since completing AFIT. Therefore I have not experienced the 1:1 dwell ratio that others say we are now in. If this is true, my intention to separate after my commitment is up would increase dramatically.

Currently on a 12 month deployment to Iraq.

The economy, combined with the fact that we live in the middle of nowhere has prevented my wife from finding suitable employment, despite her masters in nutrition, a high demand field.

Besides the obvious issue of a high deployment ratio, the amount of training that goes into the deployment ratio is even more of an issue for normal life at home and home station job requirements. If you're only home for 6 months, and then there's the potential for 1-3 months of CST, the time at home station is minimal when you factor in Leave, R&R, Silver flag etc etc. At home station, Lieutenants are forced into the most menial of jobs for an officer in the Air Force. After years of training at the Academy or ROTC, and all the aspirations to be a leader and to do great things, we're put in cubicles and told to program or to project manage menial routine construction (IDIQs etc) with little respect or responsibility given to us by civilian supervisors who see us as "temps." This is compounded by the deployment ratio as there are no opportunities to take hold of real-world important projects. The result is Lieutenants who don't feel challenged, who don't feel like they're living up to the expectations of officers in the US Military, and to no attachment or reason to stay in the military other than apathy in finding a job outside. So while the ones that crave responsibility and real problem solving and a challenge get out, the underachiever can coast by and eventually be promoted. In my humble opinion, I'd attribute lack of retention with the 2 aforementioned issues. If the current economy was better, there would be very little reason to stay in the Air Force and specifically the CE field because of the wealth of other, better opportunities out there.

I enjoy CE. My problem is with the Voluntary Separation Pay CE officers received a few years ago. Those people would have separated regardless of the VSP. The ones I knew already stated that if tagged with a 365, they were getting out. Others were just getting out as soon as the commitment was up. The VSP just happened to be good timing with those people. Some had even received the retention bonus from 2002. To make matters worse, with the ops tempo we didn't need people getting out. Now we are strapped for personnel. On another topic, I don't like 32E's getting hit with "any officer" type deployments. It is an incredible waste of manpower in the career field. There is a vast pool of 62E's and the like (frankly any career field that isn't deploying) that can fill those "any officer" taskings. Hopefully, things have changed and those personnel are starting to carry some of the load. I just don't know because that kind of info isn't advertised. I think that info would make highly tasked career field personnel (i.e. CE) feel better. I'd also like to see a retention bonus for 32E's. I've heard there is one coming, but I'm sure I will somehow get left out by year group.

I'm very proud to serve in the greatest Air Force in world and I believe that the finest people in this great Air Force are those that serve as engineers, but young CE officers are not really given the chance to be part of that engineering family. The AF paid for me to get a degree in Civil Engineering and has given me the opportunity to expand on that knowledge with many AFIT courses, so why doesn't the AF let me use some of that knowledge? Let me work with the shops, let me be in charge of teams doing work on base, give me some responsibility and a job that I can actually take some pride in and see what happens. Enough shuffling papers for some civilian that has been doing the job for the last 40 years and is going to end up doing it his way no matter what your input is. Give me a chance to be an engineer and a leader.

I'm really just unhappy with the AF right now. The deployments will come and go; they suck, but they're not deal breakers in themselves. I want to like this job because I believe in the importance of our mission, but I'm disenchanted by many of the leaders I've dealt with in my

short career. Many leaders are box-checkers instead of good managers. I simply do not want to work for someone that doesn't care about their people.

From talking to other incoming second lieutenants, it appears our location preferences were not paid attention to (many of us ended up at bases not on our list of preferences but on other incoming 2d Lt's lists of preferences). This perception makes many of us feel as though the Air Force, and CE, has little regard for our own lives and interests. I would have personally taken the preference lists and requirements and matched them up if the functional would have sent me the data because that individual, it appears, did not make the effort to do so. The current ops tempo, if it does not change, will make it difficult for me to develop my personal life outside of work and pursue other interests, such as further education. I like my job and CE, and feel that I am making a difference on base and in the world. I also like the unique opportunities the military affords. However, the impact on my personal life and goals outside the career field, considering my perception that there is little regard for them, make me inclined to go into industry as a structural engineer where many of my peers are already working.

My wife has an excellent career as a teacher with a Masters in curriculum development and it still takes a back seat to my career. With the current deployment taskings, my experience, her desire to teach.....why would I stay in? The Air Force is quickly burning officers out in my age group and it can't compete with having a family life that allows for spouses to have a career as well as kids growing up in one place. Why put up with constantly moving, never getting to settle down, always deploying? What's the incentive? If there were bonuses at least people would have something to make up for the hardships we deal with in today's Air Force. Our career field is also not very rewarding. We lead from a desk and get out seldom at best. This is not exciting anymore and more of a burden than anything else. It's getting so I hate to come to work. Yes, this is what I signed up for. No, this isn't what makes a fulfilling career.

With increasing Ops tempo and decreasing ranking personnel CGO's are being asked to do 3x's the duties their CC's were doing at their rank. Filling an above grade position should be compensated. Working 12 hr days should not be the norm. Feeling like you cannot take leave w/o dropping the ball is not acceptable but happens all the time (less than 2wks of leave in the past yr). Centralizing mgmt and funding adds new responsibilities to us as well. Although I plan on staying 20 I am unsure I will want to if things keep up.

I enjoy working in the CE career field and generally in the Air Force. I also enjoy the numerous travel opportunities for my current job. Overall, the biggest factor that keeps me in the military is the people I work with. CE has great people especially the folks in the shops. However, what puts me off the most is dealing with the bureaucracy and politics of the military way of life/work (basically "Dealing with the [expletive]") and the constant flow of work we seem to create for ourselves. Maybe we aren't "creating work for ourselves" but not much is explained at the junior officer level why we do some things the way we do. Being at a staff job has opened my eyes to the strategic/operational levels of the Air Force, however, base level engineers never get this view. I am excited to see new deployment opportunities in Afghanistan going to the "hub-and-spoke" concept instead of sitting on a FOB for 6 months like I did. I have only been deployed once, but looking forward to my next one coming up soon. I would like to see more RED HORSE opportunities as I applied to 3 of the 4 units last year and didn't get one of their jobs and also a more detailed EOD application process. I was (and still am) interested in EOD, however, the application process went through AFPC and many of my questions couldn't (or wouldn't) be

answered. I even requested contact info for the EOD FAM to ask these questions to and was told I had to work through AFPC.

The CE Career Field needs to re-assess the special duty assignments that goes to CE. CE has moved to a 1:1 deployment ratio because of stressed the career field is and they are still allowing CE Officers to leave the career field for special duty assignments (both volunteer and non-vol assignments). These officers would be better served by staying in the career field to help reduce the burden already on the career field as a whole. It would be nice as well to increase the officers in the career field to help ease the burden on the engineering officers.

One thing that was forgotten was being overseas but not deployed. I was nonvoled to [a remote assignment] and spent time at [another base] while it was a remote assignment. Those should count as time away from your family. I have spent more time living overseas (deployments and assignments) then I have state side. The only time that I have ever considered getting out of the AF was in regard to the decoration process durring deployments. It is the most unfair system that we have. Some people get Bronze Stars for the same work that others are getting achivement medals for. This system is broke.

I worked in the civilian industry for 12 years before joining the AF and currently I plan to stay in until retirement and beyond if I can continue to contribute. Deployment tempo, job positions, promotions and future policies may influence my current plans. One of my main concerns is to finish my Master degree before I PCS again.

It's good to see that architectural professional development is still ignored in a CE officer survey. We're expected to do it completely on our own despite the fact that it's impossible. We're not at a base long enough to work under an architect and gain enough hours, it takes 4 full years. The AF doesn't perform the full range of items necessary to get all required hours mandated by NCARB. Both bases I've been to haven't had registered architects to work under. The ones I've spoken to in the AF have no clue on how to mentor someone to achieve their RA. The architectural mentor MUST be in the same organization as you, we can't go downtown to find someone. Senior leadership continues to stress that it's important for us to get a PE/RA despite the fact that they ignore any requests to develop a program to assist us. Having a standard 10-12 hour duty day, working on our masters at night, SOS by correspondence and in residence, constant TDYs, and a 1 to 1 deployment rate doesn't exactly leave us a lot of time to go it alone does it? And that's assuming we could even do it on our own which architects can't without a strong mentorship program that can travel with us from base to base. And now we're deploying at an incredibly high rate and expected to have all the technical knowledge that the AF never saw fit to give us. And you're wondering why it's difficult to retain people?

The AF provides a great start to a CE's career. It has been a pleasing experience so far. My family's attitude toward moving and deploying will be considered when my decision is made. As far as deployments, it seems unfair that civilian corporations can pay their engineers two or three times our salary for putting their lives on the line, while the AF can only muster an extra \$500 plus no taxes. We all serve and should be compensated appropriately. Additionally, if the deployment tempo becomes a one to one dwell, that will again impact my decision to stay in the AF.

Please note, many of my answers are influenced by being mil to mil; particularly regarding deployments. In subsequent survey's, you may consider providing "mil to mil" as an option under marital status as there are several of us w/in CE.

Response to Part I, Question 5: Those who do well on the job stand a fair chance of being promoted. While I agree with this statement, I also believe that those who do poorly for just good enough also stand a chance (whether it be fair or not) of being promoted. Response to Part I, Job Attitudes, Statement 1: I do sometimes feel my in garrison job is meaningless, especially when the tasks I'm given are unclear, have no set objective, and after spending deliberate time on delivering a product, that product isn't used. I would ask leadership to either be more clear about their expectations or provide valuable feedback throughout the process to ensure the product they want is being developed. If the product isn't required anymore, then stop the task. Response to Part II, General Attitudes: I would be very happy to spend the rest of my career in both the CE Career Field and the Air Force. However, my family life conflicts with this end state and therefore, decisions have to be made. I can't have both the AF Career and the family. At the end of the day, an AF career is only 30 years max? In theory, your family is the rest of your life. How could I not choose my family? Response to Part II, General Attitudes #9: Too much of my life would be disrupted if I decided I wanted to leave the CE Career Field/Air Force ? the answer is no, in fact, staying in disrupts my life too much. In the near future the AF is going to want to move me away from my current duty station. Unfortunately for the AF & my desire to stay in the AF, my family is not moving from this location, and therefore, neither am I. I wish there were some other alternative. I could extend my time here by maybe a year, but eventually the AF will need me to move on and that is just not an option for me. However, separating from the AF, no matter how painful that may be for me, is an option. Section V: Demographics: I have a large issue with these surveys because you are either single/never married or married. While I'm not married, my significant other is basically my spouse. Every decision I make regarding my future status in the Air Force is largely based around him and our relationship. We don't have to be married for it to be important and/or relevant.

The way my job works at my current base may not be on PAR with other CGOS, but I am given great opportunities, responsibilities, and problems to solve on my deployments., but feel very underutilized in garrison. Both the JET and AF "traditional" taskings I've been on were great. On each trip, I felt that my supervisor understood CGO capabilities and what we bring to the table, and combined our abilities for the most efficient management of the work at hand. In garrison, I return to a "you're just not here long enough to really do any work" mind set after deploying, and the only people who know when CE deploys are other CE folks. I feel like the AF at large doesn't appreciate my work anywhere. It's personally disappointing, and somewhat depressing. It's quite a pendulum swing from the active duty rhetoric of "we NEED engineers!" that I've heard since commissioning in '06. Generally speaking, I feel more appreciated, trusted, and respected by my supervisors on deployments than I do at home station. (but I do have more time to spend on my MS classes while at home!) The 6 months gone/ 6 months home tempo can be stressful; but the trips themselves are great once the travel is over. The only 3 complaints I have are the yoyo effect of my work level described above, and , and if deployments stay at this frequency, I feel like the CE community appreciates me, but everyone else in the AF doesn't, and I don't feel I'll be able to start a family while on active duty with this tempo, which will move my considerations for separating up. It's tough to find a "[possible] Mr. Right" in 6 month intervals!

There are a few things that really discourage/disappoint me about the focus/future of the USAF & USAF CE. These things have detrimentally affected my view of the Air Force. - Lack of real recognition for Airmen involved in ground combat operations. I have had to put my Airmen in for decorations through the Army because "Big Blue AF" wouldn't/couldn't take the time to understand the significance of their contributions on the battlefield during ground combat operations. This includes the AFCAM, and how my EOD Operators would have qualified for the Army Combat Action Badge (CAB) but couldn't get an AFCAM. - Lack of logical wartime focus. We have been at war since before I joined active duty, and yet the Air Force seems to have it's head in the clouds when it come to quickly adapting to the demands of battle. This includes points like uniforms, UCIs/OREs/ORIs, increasing bureaucratic burdens, and worthless ancillary training... issues I will cover in more depth below. - Uniforms. The USAF proved it's unwillingness to better equip it's Airmen by choosing a non-functional change in uniform simply to provide "service distinction". They resisted input to provide a useful uniform with modern camouflage, materials, and design and instead selected a uniform with less capability than the ones it replaced. It(the ABU) has an ineffective (read useless) camouflage pattern, uses a much heavier cloth than it's predecessors, is the opposite of flame retardant, is totally oppressing under body armor, makes no use of smart design features like angled pockets, fire retardant materials, and functional camouflage patterns. Furthermore the PT uniform selected is the worst physical conditioning or sports clothing I have ever worn for both comfort and functionality. Lastly the implementation of "blues Mondays" and development of a new service dress uniform smacks of organizational irresponsibility when we have Airmen in harm's way with less than the modern standard for body armor and armored vehicles. We are in the most protracted war of modern American history and the USAF brass are concerned with mandarin collars and heritage belts. It's no wonder that Airmen in ground combat operations working alongside Soldiers and Marines have had to fight an uphill battle to gain their respect. - Inspections/Exercises/Bureaucracy and Useless CBT Training. I probably spent too much time on the proceeding issue so I will make this as succinct as possible. Most Airmen signed up to work hard and become skilled experts in their field while serving their country in wartime. When the Air Force squanders their time with inspections/exercises that focus on outmoded methods of operating and then tries to tell these young battle hardened Airmen that they are not capable of accomplishing the wartime mission it is an insult to their intelligence and to the Air Forces valuing of them, their real and useful skills, and their time. We are at war. We need to train and equip to win this one, and prepare for the next one, not play games to simulate a war that was a possibility back in the 80's. Besides squandering precious homestation time with unrealistic exercises and inspections of questionable value, the Air Force also is increasingly levying more red tape and bureaucracy in the name of visibility/accountability/tracking. The time this takes detracts from our homestation mission, and preparing for our wartime mission. Additionally the Air Force seems to be attempting to force feed Airmen a steady diet of CBTs of little or no value that are almost always simply clicked through at as rapid a pace as possible. This seems to be "Big Blue" covering themselves so if someone is hurt, killed, or indicted they can say "Hey, we trained them on that, they knew better". In reality this training takes away from the real training they should be doing for their specific skill. Because they spend less time training their specialty, they will be less proficient and also less safe when they perform the duties of their primary AFSC.

My biggest gripe thusfar is the lack of mentorship I've encountered. Perhaps I haven't pursued it aggressively enough, but it's very rarely been offered. My staying in is largely based on deployment tempo and family concerns.

I personally have not been effected much by the 1 to 1 dwell, however, many of my contemporaries have. One specific example is an CGO who missed the birth of his first child (wife also had a complicated pregnancy) due to deployment. When he returned from deployment, he stated to his superiors and his MAJCOM/A7X deployments FAM that he intended to have another child immediately, and requested that he could stay in place at least until his second child was born, then deploy again. He was not asking NOT to deploy, he was simply asking for some extra time to help his wife then return to the fight. He is currently deployed again and will miss the birth of his second child. He fully intends to leave the AF following his deployment. My observation is that money and job opportunities are not the issue. The problem is solely and squarely with deployments. I share the sentiment with my peers that if I wanted to be in the Army and do Army taskings, then I would have joined the Army. Instead, I joined the Air Force because I fully expected and intended to serve the Air Force. I've noticed that the Army's retention problem is also due to length, number, and frequency of deployments. It is disheartening to sit in the desert and be told when you will be expected to return. If the Army has this problem, then WHY would the Air Force chose to spread the disease of disillusionment to its Airmen by sending us into that same environment of constant deployments for continually extending duration, to do jobs that Airmen have never been traditionally trained to do? The increasing number of Joint Expeditionary Tasks (JET) is mostly to blame. I try not to present problems without solutions, so here's my recommended solution: If the other branches of service feel that Air Force Engineers are so valuable, then it is in their best interest to recruit, train, and field competent, engineering degree holding engineers in the same manner that the Air Force does. I compare this to loaning a neighbor my tools. If my neighbor does not have a hammer, and I let them borrow my hammer once or twice, no problem. But if he/she becomes fully dependent upon my hammer to build themselves a new addition to their house, then perhaps its time for my neighbor to purchase his/her own hammer. I understand the usefulness of joint warfare. If one branch of service is better at accomplishing a task, then that branch should take the lead in training the other services to accomplish that same task efficiently. Share the corporate knowledge. This has already been accomplished with EOD technical training. Going back to CE CGOs, perhaps the training we receive at the Air Force Institute of Technology could be harnessed to pass the AF engineering expertise on to our sister services. I realize this takes a significant financial effort to hire extra instructors (which would create jobs for the American economy), schedule additional classes, pay for TDY costs, etc, but perhaps this option would be more economical than losing the AF civil engineer capability entirely because no one wants to work with the Army.

Reasons why I consider separating: - Lack of satisfaction with squadron level assignments I didn't gain much engineering or leadership experience in my squadron level jobs. CGOs are typically stuck in an office away from the main CE mission with the excuse of "building depth". I could provide a laundry list of examples, but one that sticks out is programming. Many LTs are assigned to the programming office but spend most of their time entering data into ACES instead of truly developing engineering requirements to support the mission. I'd recommend the programs flight assign LTs to several projects that are in different phases of the construction process. The first time I ever stepped on a construction site was my first day [in Iraq]. After my deployed experience, I realized that the lack of project experience is unacceptable. ACES data entry, refuse contract management, and pollution prevention policy writing are all important, but they didn't prepare me to plan, program, and execute projects (contract and in-house) to build/maintain an airfield. Also, while these jobs tested my organizational skills, they didn't

make me feel like an engineer or a leader. Why I consider staying: - Mission impact I can't find another job that provides the same opportunities to make a difference in the world - Master's degree opportunities are fantastic Going to school full time at AFIT or CI on salary is an awesome deal. - The CE community is a great family My private sector engineer friends don't have anything comparable to the relationships built within CE. - Weak economy Military jobs are stable. A bonus would play a very important part in my career decision when the economy recovers. A bonus right now would be nice, but probably wouldn't seriously affect my decision in the current economy.

I would like to note that while this survey takes into account the attitude of CGOs, it does not take into account the type of person that wants to stay in. From my limited experience, every single person I have ran into that wants to stay in is not the type of leaders I want running the future Air Force civil engineering squadrons. The hard chargers and over achievers are getting out because for one, they are smart enough to realize the trend and two, they are not being rewarded proportionately to the amount of work they do in comparison to the somewhat good people. Every CGO gets a strat line on OPRs, when only the really good ones should.

I have several concerns about CE that may affect my decision to stay on active duty and/or in the AF. 1- The deployment/dwell cycle is not sustainable. 6 months home between deployments is inadequate time home with family. In addition, no one can be gainfully employed at home station because they are only available a few months to fill a position. Once you account for post-deployment leave and Combat Skills Training, a CE officer is only available about 3 months to fill a home station job. Home station billets are now nothing more than place-holders. There is no capability for OJT or home station development. 2- The CE career field is two-faced. When deployed, we are expected to be engineers. In home station, we are expected to be managers. Officers are deploying downrange with little to zero engineering experience because of the lack of OJT or practical engineering being done at home station. 3- Educational opportunities are difficult. Getting my MS on my own time is exceedingly difficult with the current deployment tempo. AFIT is the only choice if I expect to go to school full time, and that's assuming I am accepted into the program or that I even want to be out of the CE career field for 2 years.

I've only deployed once and haven't yet been through the assignment process. I have some plans in mind (masters degree, assignments, etc) that will keep me in the Air Force for a while yet, but I don't know if it will be until retirement.

Short deadlines, few resources, long hours...doing a good gets you to tomorrow and you start over again. Good workers are overworked. Sometimes favoritism is too much...some never get anywhere no matter what they do and others do nothing and go everywhere. Depending on who you work for you're their stepping stone to promotion. The people who do a lot of work and don't have a certain 'look' gets passed over. The focus is on what the AF should 'look' like. CE should provide study weeks/months for every officer to take the FE/PE, but instead, you can become stagnant if you can't balance home and work life to increase your education level. Oh, long work hours doesn't help you complete your education it pushes it out further or takes the wind out of your sail. The AF should make time for everyone to go to school, not just the ones who knows how to massage the boss. You can get a quality family force (weeding out folks will put good people on the bottom) or a quality 'single' individual on the team.

I believe in what we do, but frequency of deployments make it hard to live a balanced, normal life. Task saturation at home station is the norm due to officer deployments, hence home station officers are also negatively affected. Also, current perception on assignments is unfavorable among CE CGOs I have encountered -- response time and decisions seem to be short-sighted and capricious in nature. I understand that we are a voluntary force, but having given so much and risking alot, current AF CE environment don't seem to compensate our personal sacrifices.

The largest concern I have is my ability to start a family and be in the Air Force. How am I supposed to meet a women, date her, ask her to Marry me in approxatmly the 6 months I have (either deploy again or PCS). Also it is difficult for me to really get behind the career field. CE is extremely under appreciated. I know being in the AIR Force we are not the #1 priority but if you take a look at the other officers I graduated with I have been in many more combat situatuions. Then at home staton we are constantly reminded that we are "only there to support the pilots". CE is not being treated as the operational force that we are. (At least that is the preception I have). Additionally no one believes CE is on a one to one dwell. During base excersies the Cops can pretty much name there schedule because of there ops temp (which i do agree with) but CE should be treated the same way. We are deployed just as much. One last comment a SNCO made to me today. He said "CGO's are like bigfoot, it is amazing when you actually see one around." He is right we are never here or have enough time on staiton to go aournd and meet people.

I love being a CE officer, but it is hard on my family life. I love the opportunities that CE officers have and I love leading Airmen. However, the current deployment strain makes normal family life essentially impossible. I feel like senior CE officers don't understand the strain of these deployments on a young officer that wants to start raising children and facing the fact that for half of a year you will be gone.

Our current medical/dental are already overloaded and the issues will only compound once airplanes show back up to the base and the Army shows up. Our services are unable to deal with combat stresses past what the normal AF person experiences without leaving the wire. I witness it on a daily basis of our medical facilites unable to treat patients in A: a timely manner and B: to the extent of what they require. It can take upwards of a month to schedule an appointment then when our warriors who do spend entire deployments outside the wire start talking about what they have seen, the medical staff is ill-equipped to deal with it.

I no longer get COLA even though I still live in part of the country where the cost of living is retardedly high in comparison to other areas. We also don't get equivalent BAH as people that live only an hour away at another AF installation. The two towns nearest my base that the zip code is used for to determine COLA and BAH are so poor, that no one in their right minds would live there for fear of getting their house broken into by meth addicts. So I sacrifice the drive and mileage to live further from base, but I pay a premium for my rent in order to live in a safe area. The clinic available at my base is lacking in every way. If we have anything other than a head cold, we are referred to the other AFB about an hour away. God forbid anyone have a serious problem, they have to basically commute hours just to receive decent medical attention. I don't even see why we even pay to keep this clinic in service as it is pretty much useless except for the most basic of tasks. The services/clubs, etc. on base are ridiculous. There is not enough infrastructure on base to warrant putting money into the club. However, people are constantly trying to promote club membership. The Air Force would save so much money if they just did away with clubs at poor bases such as mine. They charge ridiculously high prices for average to

bad quality food, and members get such miniscule discounts that it doesn't promote membership. Vacation opportunities are fine as I realize that the military gives more vacation than many companies in the private sector.

Why does the AF insist on doing PHI & PH2 exercises during home station time in between deployments? Not only do I have to deploy for half a year every year but now when I come home from deployment I have to prep for ORE/ORI events that don't really even pertain to present day operations. The AF is behind the times when it comes to exercise requirements. The biggest challenge in leadership right now is explaining to the airmen I work with why we are doing PHI/PH2 exercises with half the squadron deployed and the other half at CST. Let us relax when we're at home! This is what is going to drive me out of the AF! The man hours that it takes to prep for one of these pointless ORIs is astounding not only on the officer side but also from the enlisted work force. Normal duty day from 0730 to 1630! That is laughable. Try 0500 alarm clock for PT & barely enough time to pack lunch in my mouth & leaving the office at 1700-1730. Have to go to bed at 2000 b/c PT starts at 0500 the next day. 12 hour days with a few night shift ORE days thrown in there for six months before I hit up CST (which oh by the way doesn't count toward deployment time). Solution: Cut the crap during home station time and the deployment temp might not be so bad.

Dental/Health care in my family's case has the largest room for improvement. For most issues, I have to visit the clinic more than once to be seen. Typically first to verify that what I scheduled the appt for is true, and a second with the specialist. Most of the times a third with the specialist follow up. Same goes for dentist...once for doctor's review and once for cleaning. I realize this probably does save on unnecessary doctor visits to specialists and better scheduling of doctor/dentist/techs time, but it is a pain on the patient. My wife has the need to see a dermatologist and gynecologist on a regular basis but must first take the time off of work to visit the doctor to ensure she really has the need...which she has for years. She recently switched over to Navy primary health provider and they allow here to see the specialists with just a phone call. Much much easier.

The biggest decision maker to separate stems from the time I spend away from home, the number of excersizes coupled with both mine and my husbands deployments. I have had to activate my family care plan too many times in the past two years. On top of that with inadequate childcare on base (the base never got my youngest son in childcare even after a year) it is very difficult to manage family with long work hours while one of us is deployed. If I seperate, I still have health care benefits and I plan to return to school.

In essence I enjoy working in the AF, not because it's the AF, but because of the personnel that work for me; if it wasn't for them, I wouldn't be here. I could care less for the restrictive and bureaucratic nature of the AF. We often shoot ourselves in the foot, write a report about it, salute smartly and repeat as often as not necessary. I wish that I had more than two deployments, but my assignment cycle always seems to get in the way of it...however; I did run into a Vietnam vet this last deployment to Iraq and gave me the perfect quote for how things are running; when the war moves out, the bullshit moves in. We are dealing with the latter and I see no change in the future, save to say it will get worse... all that said, I love serving my country and our enlisted force that moves us forward. It hurts to say that one day, sooner than later, all of the BS will eventually overcome the desire to serve them, that will be a sad day.

The part of the AF I would most like to see changed is administrative; this is where the majority of my time is spent. The following is one example. I believe in recognizing my people, but fail to see the benefit of having base quarterly awards and MAJCOM Career Field awards that cause me to have to write double. Not enough time has been invested teaching the enlisted force how to write. Teaching them these vital skills would do the most to reduce my workload. Another great expenditure of government resources is Force Protection Projects. For example, I fail to see a greater need in spending tens of thousands of dollars to move a road back 10-20 feet versus investing in something like utility/facility upgrades. In the course of my career I've been stationed with the Navy Seabees for three years and in Korea for two years. Hence all of my deployed experience has been with the Navy. My desire is to deploy more hence any dissatisfaction.

As an AF officer first, CE officer second and EOD qualified CE officer 3rd I question how we can segregate the CE career field from the AF as this survey would suggest. They should be considered as one entity. AF Deployments are tough, but a fact of life in our business. A few real focus points should be: 1. Ensuring our folks are adequately trained for the business of deploying...ample firing, small team tactics, combat life saver, combat driving and training with the equipment with which we fight. Football teams don't go to the big game with just-in-time training and nor should the AF. It must be a core competency. 2. While deployed we must take care of our Airmen, provide them top cover and resources to accomplish the mission we demand. We cannot settle for less than the best training and resources and we must posture ourselves financially to acquire the best equipment. This isn't the Army's war...this is the nation's war and we should not continue to play third string with third string resources. 3. While our Airmen are deployed we must exercise good leadership back home and ensure the families of our deployed members are not left unsupported. The AF job is tough, but: 1. For those who put in ample effort they get rewarded. 2. No experience is better than the opportunity to lead and achieve mission success...be it at homestation or deployed. The AF has a tendency to look at award packages from down range in higher regard than those from homestation... Regarding mentoring from AF leaders: I've been privileged to have some great mentoring in my career, but I don't think all CGOs have been so lucky. It's important that we develop the skill of both receiving and providing mentoring as it's vital to our growth as leaders. Leaders should hold their appt with CGOs for breakfast or lunch as they would for any other requirement to ensure their in touch with their officer's issues. Many of the topics discussed in this survey are a local commander's specific purview and it takes leadership to guide the team through these times. Those CC to CGO mentoring times are important to lead, develop, squelch rumors and mitigate whining. Summary: Focus on doing what it takes to keep our Airmen alive...expeditionary training and resource, leadership, experience. We're still not doing enough... Focus on time off when needed to take care of self and family... Focus on mentoring...leadership can guide attitudes and attitudes are pervasive throughout an organization

I feel that as an AFIT student my answers, especially with regards to Ops Tempo, aren't fully reflecting the Air Force norm.

I separate 1 May 2010. I choose to separate after I was tasked with my first deployment for a year to Afghanistan 5 months after my daughter was born. I requested to volunteer three times prior to my pregnancy for a deployment 2 of the three times my commander would not allow me to volunteer. The third time the tasking fell through. I would have been willing to deploy for 6

months or less, but not for a year with an infant at home. There are several companies that want to hire me however the issue with finding a new job has been initial compensation. Most of the jobs will be a pay cut. They do have future promotion in 1-3 years based on my performance rather time in grade. It is frustrating to see peers who have poor work ethic promote at the same rate when all they are doing are breathing.

Many of these questions do not apply to single officers - you almost have to have 2 completely different surveys or these results aren't going to make sense. One of the biggest reasons for dissatisfaction among 32E CGOs is the base-level jobs we do at home station vs. deployed - all we do is the jobs we couldn't get a GS civilian to do (programming, AMP, environmental) and then when we deploy we get the good jobs like project management and design. This leaves us virtually unemployable in the private sector unless we come back to work as a [contractor] in the same job we separate to get away from or work for [an engineering firm] on projects we programmed. Also the assignment process has a lot of CGOs upset, particularly [AFPC's] management of the system - basically if you tick [them] off [they] banish you somewhere and you're stuck at a base with 3.5 years to wait before you can think about submitting your ADP again, which is a joke since nobody is getting their ADP preference anyway. Then factor in the stories we hear about good dudes getting passed over for Major because they didn't get sexy OPRs or a strat because they were deployed for 6+ months of the rating period with their biggest bullets coming from their LOE and your BCE and MSG don't even know your name or what you did - it's a lose-lose when you look at the options in the private sector and the options for staying in. I could go on - if you want to hear more please contact me.

Deployments are a problem. I don't want to spend over half of my foreseeable AF life in deployed locations. I just graduated CST 2 days ago...the curriculum is questionable and the quality of teaching seems like they threw the class together the day before. I hope the rumors are true all CST will be in Tyndal in a few months. Maybe they'll be able to hire quality contractors who have up to date information/TTPs and can teach us what we truly need to know. If CST stays like this class I just graduated, congress should cut costs by eliminating it. I hate working for the Army when they won't listen to what we have to say. Why does the Army want us if they won't even let us do our job? i.e. artillerymen wanting to put morgues next to DFACS and arguing about the need for clean water for concrete. The recent rumors (just rumors so far) about the changes in deployed locations (specifically Iraq) about trying to reduce demand by going to hub/spoke seems like a step in the right direction. A possible by-product of this is the Army will have less control over our jobs there, we won't be stuck at little bases staring at walls because the Army wants engineers there just in case. Leadership [in Iraq] will be able to move us to where we actually have work. Civilian work after the military: You hear rumors about people getting very good jobs, but how many actually get those jobs? The CEP contractors here drive from 2 hours away and rent apartments during the week just so they can find jobs. I've heard a lot of time in civilian jobs is devoted to CYA and the benefits aren't as good as we're getting. I have some thinking to do on this deployment.

My dissatisfaction with the CE career field and the Air Force currently has everything to do with the recent CE reorganization and with the projected deployment tempo. The CE reorganization served to eliminate CGO positions within the squadron. Now the only actual officer position within the operations flight is the Ops Flight Commander. How exactly is an officer supposed to learn how to be an operations flight CC when he doesn't garner experience within the flight as a

CGO? Currently I fill the position as a superintendent for operations support, which is being reorganized to act like a maintenance engineering section of old. The reorg states officers should primarily reside in CEP now. From my experience at 3 different bases, the use of officers within the engineering flight (now known as CEP) varies considerably. Only one of the three bases I was at allowed officers to actually act as project managers over large construction projects. The other two were dominated by US or local national civilians. In those places, CE officers simply acted as "special projects" or "action officers" making powerpoint slides for the next briefing. No level of authority is given to them to make decisions. Learning about your job is very difficult when you're not given the opportunity. This is especially important when you're expected to do all of those tasks and make those engineering decisions when you're deployed. So that's why you have inexperienced officers going downrange. Although I haven't deployed more than once, I feel that being told you'll be deploying every year, or even every 6 months is unacceptable. I know I will be deployed this coming summer and potentially again the following summer. Why were so many good officers paid to leave only 3 years ago? This tempo would not be required if that VSP had not occurred. It's a self-perpetuating cycle: as more deployments are levied, there are less officers at home station to work within a CE unit, therefore said unit learns to operate without those officers. When the officers return, they have no job to return to. Then you deploy again. Resultingly, job satisfaction is quite low. The current medical service in the AF is very inadequate. There are not enough doctors and it is very difficult to get an appointment for common ailments. PHAs are a joke. I had a SrA administer a questionnaire to me for my last PHA. I do not feel that they provide any sort of real value in terms of preventive health. The last time I became very sick, I could not get an appointment with a doctor and spent a full month dealing with symptoms of bronchitis and flu. I made repeated attempts to get an appointment, but could only get in to see a nurse. The nurses could not prescribe any drugs for me. Finally I got an appointment after repeated tries and was given antibiotics. The symptoms cleared up within a week. I spent a month dealing with being sick for nothing essentially. At my last base, I could only see a doctor by going to the emergency room on base. Appointments were only given through a phone appointment line, that was often disconnected. At my current base there is no emergency room, so your only alternative is to go through my month long battle experience I described above, or go off base to a [local] hospital. Basically, it would be in my own best interests to not get sick again.

Great survey, but maybe a little long. I am looking to retire from the military, but am strongly considering ANG AGR opportunities. I have even applied and interviewed for positions. I'm on the right path and don't want to quit now, but it's a bit selfish of me to miss 50% of my children's lives just so I can retire at 44. I'll get back from this deployment in March and I'm slated to leave again in December. I got a school slot and was selected for Major. The main reason I'm sticking around is that I think I should only have to deploy one or two more times before I PCS for ACSC. By then, I'm hoping the ops tempo has diminished and we won't be at 1:1 after ACSC.

Vita

Captain Kevin C. Riddel graduated from Mount Carmel High School in San Diego, CA in May of 1990. After graduation, he enlisted in the United States Army Reserve. In March of 1992, he entered active duty in the Army where he was assigned to the 335th Transportation Detachment, Fort Eustis, VA. While in the Army, he deployed in support of Operation Restore Hope in Somalia and Operation Support Democracy in Haiti. In March 1995, he left the Army to pursue higher education.

In May 2004, he graduated from the University of South Florida with a Bachelor of Science Degree in Civil Engineering. After graduation, he worked for Hubbard Construction as a construction engineer and Volkert and Associates as a bridge inspection engineer. He left the private sector in May 2005, and was commissioned through Officer Training School in August 2005. Upon commissioning, he was assigned to the 4th Civil Engineer Squadron, Seymour Johnson AFB, NC. While at Seymour Johnson, he worked as a project programmer and as the squadron section commander. In April 2007, he deployed to Balad AB, Iraq where he served as the operations officer for the 732nd Expeditionary Civil Engineer Squadron, Detachment 6. He entered the Air Force Institute of Technology in August of 2008. Upon graduation, he will be assigned to the 3rd Civil Engineer Squadron, Elmendorf AFB, AK.

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14. ABSTRACT Increased operational pace in support of combat operations in Iraq and Afghanistan, combined with a reduction in the number of service members, has required military members to work longer and harder. Civil engineer company grade officers are among the most heavily deployed members of the Air Force. Because of this, Air Force leaders are concerned that they will encounter retention challenges with these members. To address this issue, a questionnaire designed to capture several key attitudes individuals have about the Air Force and the civil engineer career field was administered to 364 Air Force civil engineer company grade officers. Results of this study indicated that job satisfaction, organizational commitment, availability of alternatives, perceived organizational support, operations tempo, interrole conflict, and non-work satisfaction were significantly correlated with turnover intentions. Additionally, as suggested by some of the seminal and contemporary models of employee turnover, job satisfaction and organizational commitment were shown to mediate the relationship between these attitudinal variables and an individual's intent to leave the Air Force. Theoretical and practical implications, as well as recommendations for future research are discussed.					
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