360-DEGREE FEEDBACK:
KEY TO TRANSLATING AIR FORCE CORE VALUES INTO
BEHAVIORAL CHANGE

by

Thomas S. Hancock, Lieutenant Colonel, USAF

A Research Report Submitted to the Faculty
In Partial Fulfillment of the Graduation Requirements

Advisor: Lieutenant Colonel Beverly Pointer

Maxwell Air Force Base, Alabama
April 1999
Disclaimer

The views expressed in this academic research paper are those of the author(s) and do not reflect the official policy or position of the US government or the Department of Defense. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.
Contents

DISCLAIMER .................................................................................................................... ii

ABSTRACT ........................................................................................................................ v

INTRODUCTION ............................................................................................................... 1
  Importance of Air Force Core Values ........................................................................... 1
  Why is Self-Awareness the Key to Living Core Values? ............................................. 2
  Overview ....................................................................................................................... 3

HISTORICAL EVOLUTION OF 360-DEGREE FEEDBACK ......................................... 6
  Traditional Downward Feedback .................................................................................. 6
  Upward Feedback ......................................................................................................... 7
  Is There a Need for a New Feedback Paradigm? .......................................................... 8
  360-Degree Feedback ................................................................................................. 10

AIR FORCE OFFICER PERFORMANCE FEEDBACK PROGRAM ........................... 13
  Overview ..................................................................................................................... 13
  Purpose ......................................................................................................................... 14
  Preparation .................................................................................................................... 15
  Performance Feedback Worksheet ............................................................................. 16
  Problems with Supervisor-Only Feedback ................................................................. 17
  Formal Feedback Session ........................................................................................... 18
  Is the Air Force Performance Feedback Program Effective? ..................................... 19

360-DEGREE FEEDBACK: KEY TO LIVING AIR FORCE CORE VALUES .......... 21
  What’s the Best Way for Airmen to Learn Air Force Core Values? .......................... 21
  Why Should 360-Degree Feedback Augment Supervisor Feedback? ...................... 22
  Air Force Core Values as a Framework for 360-Degree Feedback ........................... 23
  360-Degree Feedback and Military Leadership Effectiveness ................................... 25
  Pitfalls of 360-Degree Feedback ................................................................................. 27

RECOMMENDATIONS .................................................................................................. 30

SUMMARY AND CONCLUSIONS ................................................................................ 32
  Relationship Between Core Values and Self-Awareness ........................................... 32
  Historical Evolution of 360-Degree Feedback ........................................................... 33
  Air Force Performance Feedback Program ............................................................... 34
Abstract

Integrity, service, and excellence. These are only three words, but as core values they serve as ideals that inspire Air Force people to make our institution what it is—the best and most respected Air Force in the world. Core values represent the fundamental principles that guide our work and everyday lives. They serve as the heart of our profession. This explains why at a recent CORONA Conference, Air Force leaders reaffirmed their commitment to these values. Originally included in “Global Reach, Global Power,” they remain intact as part of the new Air Force strategic vision document, “Global Engagement: A vision for the 21st Century Air Force.” While the vision calls for integration of instruction in core values throughout Air Force training and education, more can be done to translate Air Force core values into behavioral change. To help instill core values in airmen and strive for continuous improvement in adhering to them, the Air Force needs to expand its performance feedback program to include 360-degree feedback. This initiative would offer the best return on investment for not only teaching core values, but also living and practicing them in day-to-day activities at every level.
Chapter 1

Introduction

Lech Walesa told Congress that there is a declining world market for words. He’s right. The only thing the world believes any more is behavior, because we all see it instantaneously. None of us may preach anymore. We must behave.

—Max DuPree, Chairman, Herman Miller

Importance of Air Force Core Values

Air Force core values? Hmmm…sounds like another passing fad! Right? Well, hardly! Air Force core values are based on ethics, a system of moral principles or values, which are hardly new. As far back in history as the 6th century BC, Greek philosophers including Pythagoras, Socrates, Plato and Aristotle, recognized the importance of goodness, duty, virtue, and obligation in the fullest harmonious development of human potential. In modern times, the renowned military strategist Carl Von Clausewitz identified two indispensable traits as essential to military genius—”…first, an intellect that, even in the darkest hour, retains some glimmerings of the inner light which leads to truth; and second, the courage to follow this faint light wherever it may lead.”¹ For as long as people have lived together, the moral regulation of behavior has been necessary for their collective well-being and survival.²² For the same reasons, ethics, or core values, are just as important today in the United States Air Force.

Air Force leaders have recently reemphasized the importance of Air Force core values considering their critical importance to our profession. For this reason, former Secretary of the
Air Force Sheila E. Widnall emphasized, “These core values [integrity first, service before self, and excellence in all we do] represent the fundamental principles by which airmen, Air Force civilians and Air Force contractors must carry out their work and live their daily lives.”Realizing the critical role of Air Force core values, General Fogleman said, “Core values and the sense of community and professionalism they bring to our service are vitally important to the future of our Air Force.” Considering the critical importance of Air Force core values, what has the Air Force done to help airmen learn, and more importantly, live these core values?

The Air Force leadership has made great progress in stressing the importance of core values by “walking the talk” and publishing the “Little Blue Book.” Additionally, “Global Engagement: A vision for the 21st Century Air Force,” calls for integration of instruction of core values throughout Air Force training and education programs. Nevertheless, General Billy Boles, former commander of the Air Education and Training Command and Deputy Chief of Staff for Personnel, was right in stressing that “core value” initiatives should not be viewed as just another program. Regarding the new emphasis on core values, Boles said, “The idea is to make them more of a way of life than a program. People tend to be skeptical of programs.” In other words, airmen must live core values.

**Why is Self-Awareness the Key to Living Core Values?**

To help ensure their actions reflect Air Force core values, airmen must have a deep sense of self-awareness and strive for continuous ethical improvement in everything they do. Secretary Widnall stressed the important connection between self-awareness and ethics by citing a quote from a YMCA leader during a speech she gave at the United States Air Force Academy:

> Watch your thoughts; they become words.  Watch your words; they become actions.  Watch your actions; they become habits.  Watch your habits; they become character.  Watch your character; it becomes your destiny.
Thomas à Kempis, a 14th century German writer and monk wrote, “The highest and most profitable learning is the knowledge of ourselves.”6 Stressing the importance of self-awareness, the German writer Johann Georg von Zimmermann wrote, “Never lose sight of this important truth, that no one can be truly great until he has gained a knowledge of himself.”7 Successful military leaders are no exception, although they have been expected to cultivate ethical self-awareness primarily on their own. These leaders have been willing to set aside their egos in exchange for an improved sense of self-awareness in the pursuit of ethical growth. While traditional education and training initiatives are critical in teaching what Air Force core values are all about, is this the best way to help an airman increase his or her self-awareness with regard to his or her ethical behavior? If not, is the Air Force missing a great opportunity to guide airmen to their fullest ethical potential by ignoring any formal development of this critical aspect of professional development? The position of this paper is that more can and should be done in this regard, and the time to do it is now.

Overview

The purpose of this paper is to advocate expanding the current Air Force performance feedback program to provide airmen the opportunity to obtain feedback from all directions to improve self-awareness regarding one’s ethical conduct—an important prerequisite for translating Air Force core values into behavioral change. This process is commonly referred to as 360-degree feedback, also referred to as multi-source or multi-rater assessment. Simply put, it’s personal development done participatively. Unlike supervisor-only feedback, through this approach feedback is collected from all around the person. The advantage of 360-degree feedback is that it provides a comprehensive, broad-sweep assessment of an individual’s performance, style, skills, abilities and professionalism—including ethics, from those individuals
who are in the best position to provide it—such as subordinates, peers, customers, suppliers, as well as supervisors. This type assessment would particularly benefit Air Force senior leaders, as they are more isolated from honest assessments by nature of their position. Seneca, a Roman philosopher and statesman, was right from a leader’s perspective when he said, “Other men’s sins are before our eyes; our own are behind our backs.”8 Alexander Pope, famed for his work, An Essay on Criticism, urged, “Trust not yourself, but your defects to know. Make use of every friend and every foe.”9 This is important for in them to develop an accurate sense of self-awareness, which is a prerequisite for improving their ethical behavior and living Air Force core values. For this reason, the Air Force needs to adopt 360-degree feedback.

To provide the reader with perspective, this paper will begin by explaining the historical evolution of 360-degree feedback. Next, it will explain where the Air Force is in this evolutionary process and briefly describe the existing Air Force performance feedback program. Using this program as a springboard, the paper will analyze the benefits to the Air Force of adopting 360-degree feedback in the context of helping airmen “live” core values, not merely know them. Additionally, the paper will present issues and propose solutions with regard to effective implementation of 360-degree feedback. Finally, after reaching conclusions regarding applicability of 360-degree feedback Air Force-wide, the paper will present recommendations for including it in the existing performance feedback program.

Notes
5 Dr. Sheila E. Widnall, “Watch Your Character—It Becomes Your Destiny,” Airman, April 1994, 39.
Notes

7 Ibid., 658.
8 Ibid., 660.
9 Ibid., 660.
Chapter 2

Historical Evolution of 360-Degree Feedback

We need courage to throw away old garments which have had their day and no longer fit the requirements of the new generations…

—Fridtjof Nansen

Throughout history, people have provided feedback to others about their behavior and productivity. While feedback is nothing new, certain aspects of feedback have changed over time—such as the purpose, process, source, and manner in which feedback has been provided.

Traditional Downward Feedback

In a traditional organizational setting, feedback has typically been provided by an individual’s supervisor or the owner of a business. This is known as downward feedback. At the turn of the century, descriptions of working conditions indicate that feedback predominately focused on productivity, at the whim of the boss, usually when problems arose.\(^1\) As industrial organizations matured, this climate began to change. Additionally, new management philosophies emerged which impacted the content and manner in which feedback was administered.

In the early 1950s, the widely accepted Management by Objectives (MBO) began to emerge. MBO helped formalize and focus the feedback process since it brought bosses and workers together to formulate and work toward accomplishing specific productivity targets. Research at
the time revealed that productivity and job satisfaction both increased when people received regular feedback on their progress relative to performance targets and what they were doing that either led or did not lead to achieving the targets. With the implementation of MBO, periodic performance review meetings between bosses and their employees became the norm. While this downward feedback was a valuable tool in monitoring and enhancing productivity by clarifying behaviors contributing to the bottom line, it provided only a one-dimensional perspective. Additionally, research has revealed that unit performance may influence a boss’s feedback more than actual observations of the employee’s behavior. Finally, there was the potential problem of disagreement over results and the cause of poor feedback having a negative impact on employee motivation.2

**Upward Feedback**

Realizing the limitations of downward feedback, as early as the mid-1960s and early 1970s researcher began focusing on upward feedback, feedback from a supervisor’s subordinates which is more commonly known today as direct reports. This research focused on the impact of feedback from direct reports on managerial performance. The research concluded, “...the perceptions of direct reports about a boss’s behavior were accurate and had a positive impact, once the manager learned how others perceived him or her.”3

Upward feedback has increased in popularity ever since. However, it was not until the mid-1980s that the idea of upward feedback entered the mainstream. This happened as a result of successful research conducted at the Center for Creative Leadership—a non-profit research and training organization in Greensboro, North Carolina aimed at contributing to an increased understanding of leadership. The research focused on the positive impact of upward feedback in enhancing management development. A researcher who served at the Center for fourteen years
commented, “Our research showed that people learned from experience—the events in their lives served as a classroom.” Upward feedback led to self-awareness, which in turn enhanced one’s experience. The researcher also said, “The work we were doing at the Center on the development of senior executives made it clear to us that people’s assessment of an individual varied depending on whether they were a boss, a peer, a direct report, or a customer.”

The research at the Center during the 1980s resulted in three key findings. First, feedback is important in an individual’s personal and professional development. Second, most effective executives were learners who sought continuous improvement through feedback from others, making a point to transform everything into a learning experience. Third, most members of organizations worked in “feedback-poor” environments not conducive to the sharing of feedback among employees. This was particularly found true among middle and senior managers, whose personal needs for feedback and development were seldom, if ever, addressed. These research findings and the learned benefits of upward appraisals have been increasingly acknowledged ever since. A recent survey of 280 Midwest companies indicates that 25 percent use annual upward appraisals. Some companies, including IBM, have used upward appraisals for over 20 years.

Is There a Need for a New Feedback Paradigm?

While much had been learned since the 1960s on how to provide employees a broader view of their performance and behavior using downward and upward feedback, three trends of the 1990s—increased competition and/or downsizing, focus on the customer, and increased technology and specialization—have caused traditional supervisor-employee feedback to become largely obsolete.
To better compete, many organizations replaced their traditional hierarchical structure with a flattened structure. While this new structure reduced financial costs, the traditional supervisor-employee feedback link proved extremely cumbersome in flat organizations since supervisors, with a significantly wider span of control, were unable to observe the performance of a large number of individuals. This created a need for non-traditional feedback sources.

With Total Quality Management came increased focus on the customer, which stressed the importance of customer-supplier feedback. To improve communication with customers, many organizations eliminated traditional stove-pipe organizational structures. Flattened organizational structures established a need for horizontal information-flow, teamwork and empowerment—further establishing a need for non-traditional feedback. Additionally, project management and cross-functional teams have become commonplace, with employees often working for, or matrixed to, multiple supervisors. These working relationships require feedback from multiple sources because no one person is fully knowledgeable concerning an individual’s performance or behavior.

Finally, increased technology and specialization have also established a need for non-traditional feedback. In the modern workforce, supervisors frequently lack the technical expertise or knowledge to provide credible feedback. Consequently, this situation results in a “feedback void” unless employees are able to obtain feedback from individuals other than their supervisor.6

While increasing emphasis has been given to upward and horizontal feedback since the 1960s, it was not until the 1990s that the idea of multi-source feedback—both upward and horizontal—really caught on. Like most changes in doctrine, this was largely the result of necessity sparked by increasing competition, rather than choice.
360-Degree Feedback

For the above reasons and others, approximately 20 to 25 percent of organizations today ask subordinates, peers, and/or customers to provide feedback to leaders and managers for developmental, learning and/or evaluation purposes. In fact, twenty of *Fortune’s* thirty-two most admired companies in 1994 used either a full or partial 360-degree feedback system. With a 360-degree feedback system, employees receive feedback from multiple sources. These sources include supervisors, subordinates (i.e., direct reports), peers or colleagues, team members, internal and external customers and suppliers, and the feedback recipients themselves. In other words, the term “360-degree feedback” refers to a circular, broad view of an individual’s performance and behavior from individuals who interact with the employee and are able to provide useful information. Put another way, it’s like having a “full length portrait, a profile, a close-up shot of the face, and a view from the back all in one.”

While 360-degree feedback has many uses, there are generally two reasons for using it—to evaluate employees for the purpose of making personnel decisions, and/or for training and development of employees. According to a recent survey conducted by the editors of Compensation and Benefits Review (CBR), more than 90-percent of companies that have adopted 360-degree feedback use it in the evaluation process. Typically, 360-degree evaluations involve making personnel decisions involving promotions, pay increases, assignments, and selections for training/development programs.

While some organizations feel pressured to use 360-degree feedback for evaluation purposes in order to get their money’s worth, many have decided against it for several important reasons validated by research. First, research has demonstrated that when feedback becomes evaluative rather than strictly used for developmental reasons, up to 35-percent of individuals providing
feedback change their minds to affect a particular outcome (i.e., keep the manager from trouble or get him into trouble). Second, research indicates that ratings that are not anonymous may differ from those that are, meaning that ratings become less authentic if the individual rater believes he or she will be identified. Not surprisingly, some raters indicated they would raise their rating if the individual being rated would become aware of the rating. On the other hand, anonymous ratings have also been found to have drawbacks. The main one has to do with possible adverse legal action against the organization in the event an anonymous rating, one that cannot be traced to a particular individual, is included in a legal case against the organization.

For these reasons and others, many organizations have stopped using 360-degree feedback for evaluation purposes. A recent survey indicated that one-half of companies that implemented 360-degree feedback for evaluation purposes in 1997 had removed it as a result of negative attitudes and inflated ratings.10

To avoid problems associated with using feedback for evaluation purposes, many organizations have chosen to use 360-degree feedback for developmental reasons only. The Center for Creative Leadership supports this view. The principal underlying belief at the Center is that individuals need to “own” their assessment in order for change and development to occur. Ownership is only possible if individuals do not feel threatened by the feedback and believe it is credible and candid. Organizations that link 360-degree feedback to evaluations risk losing the value of individual and organizational development. When 360-degree feedback is used for evaluations and related personnel actions, feedback recipients may become defensive, causing them to lose focus of the benefits of feedback for their development.11 While there are differences of opinion on whether 360-degree feedback should be used for evaluation and related purposes, both sides agree that it should first be used for developmental purposes only.
Chapter 3

Air Force Officer Performance Feedback Program

Perfection is immutable, but for things imperfect, to change is the way to perfect them. Constancy without knowledge cannot be always good; and in things ill, it is not virtue but an absolute vice.

—Owen Felltham

Overview

While the Air Force has yet to adopt a 360-degree feedback program, it has implemented a performance feedback program (using the Performance Feedback Worksheet), one of the three pillars of the Officer Evaluation System (OES). The other two pillars are the Officer Performance Report (OPR) and the Promotion Recommendation Form (PRF). The purpose of the program is for development only, not evaluation. In a broader context, the performance feedback program also supports the Officer Professional Development (OPD) Program. The goal of OPD is to develop a well-rounded, professionally competent officer corps to meet current and future mission requirements.¹

The Air Force realizes that performance feedback is critically important to the overall professional development of its officer corps. In fact, the Air Force supports the contention of experts that feedback is the single most important means for changing behavior.² For this reason, performance feedback remains the cornerstone of the OES. The Air Force position is that without it, “officers would have no clear idea of where they are failing to meet the
expectations of supervisors.⁴³ (No mention is made of the expectations of others.) However, the
Air Force is quick to admit that one of the most difficult challenges is to provide officers with
meaningful feedback.⁴ As a strategy for meeting this challenge, the Air Force adopted a
downward feedback system in conjunction with the OES. Under this system, the supervisor
alone is responsible for providing all ratees with not only essential day-to-day casual feedback,
but also formal feedback.

**Purpose**

Whether casual or formal, Air Force feedback is intended to serve as a source of information
and motivation for the ratee. The way the Air Force feedback system is currently designed,
supervisors are the *only* source of feedback—for casual and formal feedback. The process
requires that all supervisors (of officers in the grade of colonel or below) meet face-to-face with
ratees to explain job requirements, establish performance expectations, and discuss how well the
officers are meeting these expectations. Most important, the process provides the supervisor
with an opportunity to inform the ratee of what actions are required to improve his or her duty
performance and grow professionally.⁵

Supervisors are generally required to conduct two formal feedback sessions with a ratee
before a performance report is due. The initial session, held within the first 60 days of
assignment to a new position, is used primarily to communicate job responsibilities and
supervisor expectations in the context of the unit’s mission. If the ratee is not new to his or her
job and has just received a performance report, this session focuses primarily
on prior performance as well as goals and expectations for the new rating period. In the follow-
up session conducted midway between the date of supervision and the projected OPR closeout
date (normally 180-210 days of supervision), the supervisor again discusses performance (i.e.,
strengths and areas for improvement) progress made, and future expectations. In addition to performance, supervisors are also required to focus on officership—such as leadership and professional qualities rooted in Air Force core values. In other words, quality feedback doesn’t just happen—the supervisor and ratee must both prepare for it in advance.

**Preparation**

Not surprisingly, the supervisor has the heaviest responsibility in preparing for the feedback session. Since this individual is the sole provider of feedback and often does not have first-hand knowledge of the ratee’s performance or achievements, it is often difficult to objectively focus on and describe specific, observable, job-related behavior. Yet, the Air Force imposes these requirements solely on supervisors, and also requires them to document and recall the information for later use. While the Air Force contends that information on a ratee’s performance is available from a variety of sources, no alternatives to supervisor-only feedback are offered. Rather, the Air Force position is that the primary means of obtaining feedback information is through the supervisor’s personal observation and input from the ratee.

Recognizing the difficulties the supervisor has in effectively observing and collecting information on a ratee’s performance, the Air Force offers several suggestions. First, supervisors should routinely make notes on performance and collect examples of work as they lend strong support to feedback. Second, supervisors should repeatedly collect information over time, under a wide-range of circumstances. The rationale is that the more samples, the clearer the picture of performance. Air Force guidance stresses, at length, the importance of supervisors taking detailed notes on a ratee’s performance and being able to recall the information later. For example, guidance states supervisors need to note what happened, analyze how the ratee behaved in a particular situation, and determine the results—either positive or negative—in terms of
impact on the mission. The Air Force acknowledges this is potentially difficult since it requires much dedication and continuous effort. If the supervisor does not continually document performance, it becomes extremely difficult to recall specifics regarding performance when the time comes to complete the Performance Feedback Worksheet. Finally, the Air Force stresses that supervisors should make their observations fairly without any type of prejudice, revealing strong areas as well as those requiring improvement. These suggestions are not a cure-all for eliminating the difficulties in observing and collecting information on a ratee’s performance, but it makes the job of preparing the Performance Feedback Worksheet (PFW) easier.

**Performance Feedback Worksheet**

The supervisor prepares the PFW (AF Form 724A for Field Grade Officers and AF Form 724B for Company Grade Officers), prior to the actual feedback session. The PFW performs several important functions. First, it helps the supervisor organize his or her thoughts and check them for objectivity and relevance before the feedback session. Second, it serves as an agenda of the important points the supervisor needs to cover. Third, the PFW serves as a permanent reminder to the ratee of what the supervisor expects and how well he or she is meeting those expectations. Most important, it provides the supervisor with the opportunity to discuss information he or she believes would be useful to the ratee in improving his or her job performance and officership. Officership is defined by six factors with supporting behaviors rated by the supervisor, which are printed on the front side of the PFW. The six factors are (1) Job Knowledge; (2) Leadership Skills; (3) Professional Qualities; (4) Organizational Skills, (5) Judgement and Decisions; and (6) Communications Skills. The Air Force acknowledges that these are the areas where supervisors are most susceptible to failing to provide an accurate, objective, assessment.
Problems with Supervisor-Only Feedback

The Air Force acknowledges three common errors that supervisors are susceptible to making when they are the sole source of feedback. These errors, acknowledged by the Air Force include rating performance as outstanding when it isn’t; allowing general impressions to influence ratings; and providing inaccurate and unsubstantiated ratings as a result of limited observations and poor recall.

First, raters sometimes inflate ratings because they are afraid of inflicting pain on ratees by low or average ratings. According to Air Force guidance, raters tend to be more lenient when they know ratees will review their feedback ratings, or are aware they are required to explain the ratings during a feedback session. Although this is human nature under such conditions, it leads to invalid feedback. Additionally, there is a problem with different raters rating their people using different standards of judgment. At one extreme, some raters play the “nice guy” role by rating their people consistently high whereas at the other extreme, some raters play the “hard guy” and rate consistently low.

Second, some raters allow their general impressions to wrongfully influence feedback. This source of rating error is referred to as the “halo effect,” where supervisors give consistently high ratings to those who are generally well liked. On the other hand, a supervisor’s dislike of a ratee can have the opposite affect. In both cases, ratings are wrongfully based on personal reasons instead of on performance and officership.

Finally, some supervisors have a problem with basing their feedback on general impressions due to difficulties encountered in effectively observing a ratee. These difficulties usually stem from limited observations and poor recall. The job of effectively observing a ratee entails continually tracking and evaluating behaviors even though opportunities are often limited at best,
evaluating behaviors in terms of relevance, and accurately recalling them for use in the upcoming feedback session. The USAF Guide to the OES lists four errors supervisors are susceptible to making as a result of limited observations or poor recall:

Attending specifically to behavior that confirms a stereotype they have developed and ignore or forget behavior that conflicts with it.

Often overlook serious efforts to improve on past performance as a result of generalizations made.

Failing to recall any specific information relevant to a feedback category, causing them to subconsciously invent examples of “appropriate” behavior based on their personal assumptions or stereotypes.

Judging a ratee on his or her most recent experiences, rather than performance during the entire period (What have you done for me lately?).

While the Air Force acknowledges the vulnerability of supervisors to making the above errors, solutions for avoiding these common pitfalls are also presented. The Air Force proposes that supervisors avoid these errors by learning and practicing several skills to make them better observers. These skills are (1) gather and report supporting evidence; (2) discriminate between relevant and irrelevant information; (3) do selective work sampling when direct observation is infrequent, and (4) decide which aspects of performance are really measurable. The Air Force position is that the supervisor’s careful application of these skills will facilitate preparation of the PFW, and also pave the way toward an effective feedback session.

**Formal Feedback Session**

The formal feedback session is a private discussion between the supervisor and the ratee to discuss performance-related issues. A successful feedback session provides the supervisor the
opportunity to inform the ratee of his or her strengths and weaknesses based on job-specific behavioral observations impacting mission accomplishment, and what improvements are expected. Additionally, the session provides the ratee with an opportunity to respond to these observations by requesting clarification, asking questions, and raising any issues of concern. During the session, both the supervisor and the ratee share responsibility for explicitly delineating steps that will lead to improved performance. More important, the supervisor is responsible for ensuring the ratee understands specific actions requiring improvement.11

Under the Air Force feedback process, the supervisor alone is responsible for providing feedback. Yet, the Air Force readily admits that this superior-subordinate relationship has serious faults. As such, Air Force guidance warns:

> Straightforward communication is often inhibited in superior-subordinate relationships. Superiors may find it is difficult to get subordinates to express their opinions unless specifically asked. Subordinates may think it’s to their advantage to discuss only strengths and to hide shortcomings. Constructive feedback for individual development requires open and honest communication.12

**Is the Air Force Performance Feedback Program Effective?**

While the supervisor-subordinate relationship has inherently limited the effectiveness of supervisor-only feedback, the Air Force performance feedback has been successful. It has served as a useful tool for supervisors in enhancing the professional development of the officer corps. Additionally, the program has provided officers with a clearer idea of how they can better meet the expectations of their supervisor, improve their performance, and grow professionally. In this regard, it has served as an important source of information and motivation. Perhaps most important, the program has facilitated communication between the supervisor and the ratee by providing an opportunity to discuss strengths and weaknesses in job performance, officership (i.e., leadership, professionalism, and ethics), progress made, and future expectations.
In spite of the program’s overall success, it has serious shortcomings having to do with the limited perspective of the supervisor. This makes it especially difficult for the supervisor to provide an accurate assessment of officership. The supervisor is seldom an individual, or the only individual, who is impacted by and observes the ratee’s performance in this critically important focusing on an officer’s character, ethics, and practice of Air Force core values. Although the Air Force acknowledges these pitfalls associated with supervisor-only feedback, it unfortunately does not propose a solution. However, the good news is that one exists—360-degree feedback!

Notes
5 Ibid. 7.
8 Ibid., 9.
9 Ibid., 10.
10 Ibid., 11.
11 Ibid., 19.
12 Ibid., 20.
Chapter 4

360-Degree Feedback: Key to Living Air Force Core Values

Changing conditions demand changing methods, and to hold to outgrown methods because of a loyalty to an irrelevancy destroys our integrity and encourages the lie.

—Gerald Hamilton Kennedy

What’s the Best Way for Airmen to Learn Air Force Core Values?

Most airmen would agree that Air Force leadership has made great progress in stressing the importance of core values by “walking the talk” and instituting core values training and education initiatives Air Force-wide. While this is essential, the time is ripe for improvement. The best way to learn anything is by doing it. Air Force core values are no exception. Learning about them through reading and classroom instruction is important, but like anything else, the real test comes with application. For airmen, this means making Air Force core values a way of life—both on and off duty. Those with experience in successfully living core values are the first to admit that this is far from easy. Just like anything else worthwhile, living core values takes hard work. For example, it requires that airmen pay close attention to everyday matters such as how they treat people and conduct themselves. Only in this way will an airman’s actions be consistent, habitual, and aligned with Air Force core values. Since no one is perfect, at times airmen are bound to make mistakes. In other words, their actions and values will sometimes be inconsistent.
While falling short of ethical ideals is human, it is important that airmen strive for continuous ethical improvement in everything they do in order for them to reach their full potential. In so doing, they must recognize their mistakes and learn from them in order to prevent them from recurring and becoming habitual. In pursuit of this goal, Air Force leadership should provide the support structure required to help airmen live core values, not just learn about them. Specifically, the Air Force needs to enhance its performance feedback program to include 360-degree feedback in lieu of supervisor-only feedback. More than anything else, this will help airmen enhance self-awareness of their ethical conduct which is a critical prerequisite for continuous improvement. 360-degree feedback will enable airmen—leaders in particular—to recognize areas requiring improvement, and most importantly, translate Air Force core values into behavioral change.

**Why Should 360-Degree Feedback Augment Supervisor Feedback?**

For years, psychologists and management researchers made the case that seeing oneself as others do is important to an individual’s psychological health and, in turn, his or her ability to work successfully with others in organizations. In today’s work environment, the number of constituents to whom individuals must respond is increasing, making this accurate view of oneself more difficult to acquire. It is no longer sufficient to acquire feedback only from one’s supervisor to get a fairly accurate view of oneself as seen by others.¹

For the same reason, airmen need feedback from others besides their supervisor in order to gain a more accurate awareness of their ethical conduct. One reason is that the ethics of airmen, and the application of core values in everything they do, involves relationships with others that are essential to their working successfully together. According to Colonel Charles R. Myers, Ph.D., professor and head of the Department of Philosophy and Fine Arts at the United States Air Force Academy, all morality concerns persons doing things that affect others. He states:
The three dimensions of any ethical issue are thus: (1) the someone who does something [Agent], (2) the something that person does [Act], and (3) the outcome of that act for someone. In particular cases the lines dividing these dimensions will be blurred because the three dimensions are inextricably linked together. A person performs acts, but those acts in turn help define who the person is. Acts produce outcomes, but acts are in part defined by their outcomes. And outcomes affect persons, but it is those persons who say what the outcomes mean for themselves and others. Still, one can discern these three dimensions—agent, act, and outcome—in every ethical issue. They are the logic or grammar of moral reasoning—the subject, verb, and object.  

Since outcomes of peoples’ actions affect others, it makes sense that individuals affected by the actions are usually in the best position to help define “who the person really is” by providing feedback regarding the ethical implications of his or her actions in the context of Air Force core values. For this reason, the Air Force needs to expand its performance feedback program to encompass 360-degree feedback. This change would permit airmen to benefit from receiving meaningful feedback from individuals most impacted by an airman’s actions who are in the best position to provide it—such as subordinates, peers, customers, and suppliers.

**Air Force Core Values as a Framework for 360-Degree Feedback**

Air Force core values provide an excellent framework for providing 360-degree feedback to the feedback recipient, or agent, in the context of the moral implications of his or her actions. Using this framework, *Integrity* defines the person who acts—the agent. *Service* defines what the person does in the context of core values—the person’s acts. And *Excellence* defines what the acts produce in terms of outcomes, and how these acts and outcomes support Air Force core values. Using this framework, Air Force core values—the values all airmen must use as guideposts to direct all of their thoughts, decisions, and actions—provide an excellent foundation for use in administering 360-degree feedback considering the enormous degree to which the
adherence to each of the three core values impacts others. Understanding this relationship first requires a philosophical understanding of the three Air Force core values.

**Integrity** comes from the word integer, which means whole. In other words, the real meaning of integrity is wholeness of character. Putting integrity first requires that airmen have consistency, honesty and courage to habitually ensure all of their actions, on and off duty, are consistent with Air Force core values. Airmen may wear two hats, but they wear them on the same head! Integrity also demands wholeness of purpose in everything airmen do to ensure their actions impact others in the right way, and are aligned with Air Force core values. Who is in a better position to assess an airman’s wholeness, or consistent application of core values, than those individuals most impacted by the airman’s behavior and actions?

The need for wholeness in purpose explains why integrity requires putting *service before self*. This means that airmen, particularly leaders, must put professional duties and the needs of others ahead of their own. The “little blue book” says, “If the leader is unwilling to sacrifice individual goals for the good of the unit, it’s hard to convince other unit members to do so. At that point, the mission suffers, and the ripple effects can be devastating.” These ripple effects are damaging not only to those led, but also to leaders themselves. Tom Morris, a contemporary philosopher, superbly illustrates this point by writing:

> Every decision, and every action, has implications not only out there in the world but in our innermost beings. It’s like throwing a stone into a pond. It never just sinks, but creates ripples. In the same way, anything you do, however small, creates ripples in your character. It makes it a little more likely that you’ll act in the same way again. Patterns are formed, however subtly. Habits of mind and of conduct begin to take root. And you change, however slightly, from what you previously were. In everything we do, however large or small, we should always be asking ourselves: “In doing this, am I becoming the kind of person I want to be?” One of the greatest dangers in life is the ever-present threat of self-deception. We often believe we can do something, “just this one time,” without it having any implications for who we are. But there are no exceptions to this
process. We can never take a holiday away from moral significance. Everything we do forms us, molds us, shapes us into the people we are becoming.5

360-degree feedback provides an ideal means of increasing an airman’s ethical self-awareness of not only the ripples generated by his or her actions, but also the ripple effect these actions have on an airman’s character. As mentioned earlier, those individuals impacted by these actions are in the best position to provide feedback to enhance an airman’s self-awareness and help protect him or her from the threat of self-deception.

While service before self focuses on what airmen do, *Excellence in everything we do* focuses on the moral outcome and quality of performance. Colonel Myers describes the moral outcome as, “the immediate and the long-term consequences of an act, the direct and indirect consequences, and the intended and the unintended consequences. The moral outcome is simply what happens to persons because of the moral agent’s act.” So, the important question is, “What results ought to be attained and what results ought to be avoided?”6 Additionally, the pursuit of excellence requires that airmen “…develop a sustained passion for continuous improvement and innovation that will propel the Air Force into a long-term, upward spiral of accomplishment and performance.”7 Therefore, self-awareness of one’s ethical behavior and actions is insufficient in and of itself. Airmen must also gain an understanding of the expectations of others in terms of which results are needed and which ones ought to be avoided. 360-degree feedback provides an excellent means of obtaining this information in the pursuit of continuous improvement and excellence.

**360-Degree Feedback and Military Leadership Effectiveness**

While 360-degree feedback has yet to be adopted by the military, Lt Gen Walter F. Ulmer, Jr., USA (Ret), former Director of the Center for Creative Leadership, believes the concept has
merit with regard to leadership development and overall effectiveness. According to Gen Ulmer, “much unethical behavior in organizations stems from gross incompetence exemplified by senior leader unawareness of the impact of policies and procedures on the various levels of the organization.”

He writes:

Superiors rarely have access to the full picture. Their views are notably skewed toward highly visible outcomes, with “means” usually taking a backseat to “ends.” This leads me to my concern that the combination of our focus on high profile short term results and performance appraisal systems whose inputs reside exclusively in the hands of the boss, will inevitably lead to the promotion of non-leaders to top positions.

This is one reason why Gen Ulmer believes multi-source feedback, particularly upward feedback, is a useful tool in identifying leader behaviors from multiple viewpoints. He believes obtaining such feedback is workable, even in a traditionally conservative setting such as the military. He acknowledges that sometimes the data obtained is not exactly what you wanted to hear, but useful. Having employed such feedback personally while in the Army, he learned from his subordinates that they would have elected him as their commander, but they wanted him to listen a bit more at times. While some commanders have used 360-degree feedback on a voluntary basis, Gen Ulmer criticizes the military for not adopting the concept. He states:

It is difficult to dispute the reality that in order to promote individuals who are in fact good leaders we must somehow measure their style of leadership. Only the led know for certain the leader’s moral courage, consideration for others, and commitment to unit above self. This is the indisputably crucial element in leader assessment and development systems. If in fact we prize these values and want to ensure that we promote those who have routinely demonstrated them, some form of input from subordinates is required. Again, the concept and technology are available to handle such inputs without organizationally dysfunctional side effects.

Self-awareness and ethical development are only a few of the many potential benefits of 360-degree feedback. Other benefits outside the scope of this paper include facilitating teamwork, identifying organizational training requirements, and supporting an organizational
cultural change. While difficult and highly controversial, many organizations have claimed success in using 360-degree feedback as a tool for making performance management decisions involving appraisals, pay, promotion and downsizing, and selection of employees for training and assignments. However, success has sometimes been limited for reasons discussed earlier.

**Pitfalls of 360-Degree Feedback**

In spite of the benefits of 360-degree feedback, there are several potential risks that threaten its validity and effectiveness. The most common pitfall is wrongfully assuming that using feedback from multiple sources will compensate for intentional or unintentional distortion. The truth is that feedback collected incorrectly increases rather than decreases the occurrence of error, destroying the credibility of results. This is why any organization should exercise great care in implementing a 360-degree feedback system. Some have made the mistake of viewing the process “as a special event, using it one time only as part of a training or coaching session. As a result they don’t take the process beyond the initial goal of providing feedback to individual employees.”\(^{11}\) This can be avoided by ensuring feedback is incorporated into continuous improvement plans. Highly autocratic, hierarchical organizational structures also pose a risk because individuals in these type organizations will likely resist 360-degree feedback since they view it as a threat to supervisor-only control. Cronyism also tends to erode the effectiveness of 360-degree feedback, since individuals who were promoted this way feel threatened by such feedback since they are no longer able to single-handedly reward political favorites. Similarly, “deadwood” in an organization also resists 360-degree feedback due to the threat of exposure. Another common pitfall is over-reliance on technology. While technology is important, it cannot overcome weaknesses in the credibility of the feedback instrument, inadequate training on giving and receiving feedback, and poor development plans. Nevertheless, quality software is essential
for proper process coordination, administration and uniformity. Finally, the most serious potential pitfall has to do with trust and confidentiality. A key here is informing employees of the plan and then sticking to it. Additionally, anonymity to recipients, and confidentiality to all employees regarding the feedback they provide, is an absolute must.12

While 360-degree feedback is not a panacea, impact from any of the above risks in the Air Force would likely be minimal at best with today’s motivated, quality all-volunteer force. Nevertheless, it would make sense to establish safeguards whenever possible. Looking at the big picture, the benefits of 360-degree feedback far exceed the pitfalls that can be remedied with careful implementation and changes in organizational culture.

Notes
3 Ibid., 40,41.
5 Tom Morris. If Aristotle Ran General Motors (Markham, Ontario: Fitzhenry & Whiteside Ltd., 1997), 164,165.
9 Ibid.
Chapter 5

Recommendations

*Trust not yourself, but your defects to know, make use of every friend and every foe.*

—Alexander Pope

Since the benefits of 360-degree feedback appear to far exceed potential pitfalls, the Air Force should explore options on how to best incorporate it into the existing performance feedback program. In doing so, the goal should be to capitalize on the strengths of the existing program while benefiting from 360-degree feedback. To ensure a smooth transition, it is important that certain guidelines be followed. First, both the acceptance and implementation of the program must begin with commanders and civilian leaders at the highest levels. This is required to set the example for others. Another reason is top Air Force leaders have the most to gain from 360-degree feedback since they are more isolated from feedback than individuals at lower levels. Program implementation should then quickly cascade down to junior officers/civilian equivalents and senior NCOs. This is crucially important for gaining the required support.

Next, the purpose of the existing performance feedback program should remain unchanged—inform the ratee of actions required to improve his or her duty performance, and grow professionally. The Air Force should continue to use the program for development only, not as an evaluation tool used in making personnel decisions involving performance report
ratings, promotions and selection for assignments and training. As such, supervisors should not have access to 360-degree assessments. Additionally, the program should increase feedback on officership, leadership, and professional qualities rooted in Air Force core values to increase self-awareness and enhance overall leadership effectiveness.

Finally, a qualified neutral third party should be available to administer the process of helping individuals use their assessments in formulating an improvement plan with goals for enhancing professional development. Confidentially is critically important. As such, this aspect of the program should be strictly voluntary. To avoid increasing manpower to administer the program, all facets of the program should be computerized. Abundant software is available for this purpose at reasonable cost. Available software is designed to manage the process to maximize honesty, help ensure confidentiality and trust, and ensure validity, effectiveness and usefulness of 360-degree feedback. Additionally, most software is designed to track improvements and identify individual and organizational training requirements.

While Air Force leadership has made great progress in stressing the importance of core values and teaching them through implementation of training and education initiatives, more can and should be done to help airmen live core values. Specifically, Air Force leadership needs to establish a support structure to make this possible. 360-degree feedback in the context of Air Force core values is the answer. It will help airmen enhance their self-awareness—a prerequisite for continuous improvement and learning to live core values. 360-degree feedback would give individuals in the best position to provide feedback—those impacted by an airman’s actions and their outcomes—an opportunity to assess an airman’s actions and their outcomes in the context of core values. This will provide airmen the best opportunity for learning to live core values, instead of merely know them.
Chapter 6

Summary and Conclusions

This paper advocates expanding the current Air Force performance feedback program to provide airmen an opportunity to obtain feedback from all directions (i.e., 360-degree feedback) to improve self awareness regarding their ethical conduct—an important prerequisite for translating Air Force core values into behavioral change. Currently, the Air Force feedback program focuses on supervisor-only feedback.

Relationship Between Core Values and Self-Awareness

To introduce the reader to the importance of core values, Chapter 1 introduces the reader to the philosophical basis for core values, which has not changed over time and remains just as important in today’s Air Force. Throughout history, the moral regulation of behavior has proven essential to the collective well-being and survival of the human species. For these reasons, core values are just as important today in the United States Air Force in explaining why Air Force leaders have reemphasized their importance to our profession. In so doing, they have integrated instruction of core values throughout the Air Force with training and education programs. While training and educating airmen on core values is essential, this paper argues that this approach does little to enhance an airman’s self-awareness which is critical in order for airmen to live core values and strive for continuous ethical improvement in everything they do. The reality is that airmen have been expected to cultivate their ethical self-awareness primarily on their own. The
paper argues that the Air Force is missing a great opportunity—that being to incorporate 360-degree feedback into its current feedback program—to help guide airmen to their fullest ethical potential.

**Historical Evolution of 360-Degree Feedback**

To provide the reader with perspective, Chapter 2 explains the historical evolution of 360-degree feedback. Throughout history, people have provided feedback to others about their behavior and productivity. While feedback is nothing new, certain aspects of feedback in organizations have changed over time such as the purpose, process, source of, and manner in which feedback has been provided. Traditionally, an individual’s supervisor has typically provided feedback. This feedback is known as downward feedback, the feedback system adopted by the Air Force in the late 1980s that is still in effect. Downward feedback increased in popularity with implementation of MBO, which called for periodic performance review meetings between bosses and their subordinates. While downward feedback helped supervisors monitor and enhance productivity by clarifying behaviors contributing to the bottom line, it provided only a one-dimensional perspective—the supervisor’s perspective.

Researchers began focusing on upward feedback provided from a supervisor’s subordinates. Researchers concluded that subordinates’ perceptions of a boss’s behavior were accurate and had a positive impact once the boss learned how others perceived him or her. Upward feedback increased in popularity and entered the mainstream in the mid-1980s as a result of successful research conducted at the Center for Creative Leadership. The research reveals that upward feedback leads to self-awareness, most effective executives seek self-awareness through feedback from others, and most members of organizations work in feedback-poor environments that do not encourage sharing feedback among employees.
While much has been learned about how to provide employees with a broader view of their performance and behavior, three trends of the 1990s significantly reduced the effectiveness of traditional supervisor-only feedback. These trends were increased competition and/or downsizing, focus on the customer, and increased technology and specialization. The trends swept through the Air Force as well as private industry. For example, the large Air Force drawdown in the 1990s forced a major reorganization that largely replaced the traditional, hierarchical, stove-pipe organizational structure with a flattened, integrated structure. As a result, Air Force supervisor-only feedback became far less effective since supervisors had a significantly wider span of control and thus became significantly handicapped in observing the performance and behavior of a large number of airmen. Flattened organizational structures in the Air Force also established a need for horizontal information flow, teamwork and empowerment. This further reduced the effectiveness of supervisor-only feedback, as supervisors became less able to provide effective feedback since their technical expertise, knowledge and observation of subordinates’ activities became even more limited. Similarly, the increased use of cross-functional and project management teams, which frequently include customers, further reduced the effectiveness of supervisor-only feedback. However, the Air Force’s supervisor-only feedback system remains the cornerstone of the OES in spite of its limited effectiveness. In effect, supervisor-only feedback had outlived its usefulness.

**Air Force Performance Feedback Program**

Chapter 3 explains in detail where the Air Force is in the evolutionary process of providing feedback by describing and evaluating the existing Air Force performance feedback program. Since relationships in today’s Air Force require feedback from multiple sources, adopting a 360-degree feedback is long overdue as a means of achieving the Air Force’s goal of enhancing
overall officer professional development. The existing performance feedback program was established based on the premise that feedback is the single most important means for changing behavior. The program’s intent is to inform the ratee of actions required to improve his or her duty performance, and grow professionally. In this regard, the program is largely designed to improve officership, including leadership and professional qualities rooted in Air Force core values. While the reasons for establishing the Air Force performance feedback are still relevant today, the program is no longer able to support these goals using supervisor-only feedback.

Ironically, in today’s Air Force environment, supervisors have become far less able to objectively focus on and describe specific, observable behavior. The Air Force contends that information on a ratee’s performance is available from a variety of sources, but no viable alternatives to supervisor-only feedback are offered. While the Air Force offers several suggestions such as collecting more samples of a ratee’s behavior to gain a clearer picture of performance and increase objectivity, these suggestions lose any usefulness they once had as a result of the reorganization of the Air Force in the early 1990s.

Since the reorganization widened a supervisor’s span of control, reducing direct knowledge of a subordinate’s behavior on the job, there has been an increased tendency to provide inaccurate feedback. In spite of the limited effectiveness of supervisor-only feedback, it is still useful in providing a clear idea of how to better meet the supervisor’s expectations and grow professionally. Additionally, it has improved communication between the supervisor and the ratee. For these reasons, the Air Force should not discard supervisor feedback, but rather expand feedback to include others who are most impacted by a ratee’s performance and behavior. In today’s Air Force, the supervisor is seldom the only individual who is impacted by, and observes, the ratee’s performance. This is particularly true when providing feedback on
leadership, which is largely dependent upon an officer’s character, ethics, and practice of core values.

360-Degree Feedback: Key to Living Core Values

Using the existing Air Force performance feedback program as a baseline for comparison, Chapter 4 analyzes the benefits of using 360-degree in the context of helping airmen live core values, not merely know them. Additionally, it presents issues and proposes solutions with regard incorporating 360-degree feedback into the existing feedback system. Most important, the chapter explains why Air Force core values provide the ideal framework for providing 360-degree feedback. Using this framework, integrity defines the person who acts, service defines what the person does in the context of core values, and excellence define the acts in terms of outcomes in support of core values. Since 360-degree feedback is given by individuals who are most impacted by an airman’s integrity, service, and excellence, it has tremendous potential as a tool for helping airmen strive for continuous ethical improvement. As such, 360-degree feedback and core values must not be viewed as mutually exclusive of each other. Together, they are the key to increasing an airman’s ethical self-awareness of not only the ripples caused by an airman’s actions, but also the ripple effect the actions have on his or her character. Again, individuals impacted by these actions are in the best position to provide feedback to enhance an airman’s self-awareness and help protect him or her from the danger of self-deception. Lt Gen Ulmer correctly recognized the connection between unawareness and unethical behavior in military organizations; and the need for the military to adopt a multi-source feedback system to increase ethical self-awareness and overall effectiveness of military leaders.

In spite of the benefits of 360-degree feedback, it is not a panacea since it has risks. However, the impact of these potential risks (e.g., ineffective program administration,
hierarchical organizational structures, cronyism, and over-reliance on technology) would be minimal with proper management, and considering the high dedication and motivation of today’s top-quality, all-volunteer force. The risks are further reduced by the high probability of success if 360-degree feedback is properly implemented from the start. Nevertheless, risk management initiatives should be implemented whenever feasible.

**Recommendations**

Since in today’s Air Force the benefits of 360-degree feedback appear to far outweigh potential risks, Chapter 5 recommends that the Air Force explore options for incorporating 360-degree feedback into the Air Force’s existing performance feedback program. In this way the Air Force would be able to continue capitalizing on the strengths of the existing system while also benefiting from 360-degree feedback. However, certain guidelines must be followed to ensure a smooth transition. Most importantly, both acceptance and implementation of changes to the Air Force feedback program must begin at the top with commanders and civilian leaders. Others will not benefit from the program unless leaders set the example. Besides, top leaders have the most to gain from 360-degree feedback since they are more isolated from feedback compared with others.

While the purpose of the Air Force’s feedback program should continue to focus on improving duty performance and professional growth, more emphasis needs to be placed on officership, leadership, and professional qualities which are all rooted in core values. Added emphasis is needed to enhance ethical self-awareness and overall leadership effectiveness. As explained earlier, 360-degree feedback will serve as an ideal tool for achieving this objective, since it will help airmen enhance their self-awareness—a prerequisite for continuous
improvement and learning to live core values. The Air Force needs 360-degree feedback to give individuals in the best position to provide feedback—those impacted by an airman’s actions and their outcomes—an opportunity to assess them in the context of core values. This is the right approach since the ethics of airmen, and the practice of core values, involve relationships with others that are essential to working successfully together in accomplishing the Air Force mission. Most importantly, this information would be invaluable to airmen for use in establishing improvement goals that will lead to continuous improvement and adherence to Air Force core values long into the future!
Bibliography


DISTRIBUTION A:

Approved for public release; distribution is unlimited.

Air War College
Maxwell AFB, Al 36112