Leadership Development:

A Supervisory Responsibility

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Project AIR FORCE

Santa Monica, California

15 April 2000

20010921 123

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Acknowledgement

The author would like to thank the following individuals for generously contributing their time, and energy to this effort: Dr. Craig Moore, Major Jennifer Graham, Lieutenant Colonel William Nelson, and Lieutenant Colonel Vickie Woodard, Charlene French, and Lieutenant Commander Joe Beel for his contributions on the subject of 360-degree performance feedback.

About the Author

Lt Col David French is currently a National Defense Fellow at RAND Corporation in Santa Monica, CA. His last duty assignment was as Commander of the 12th Mission Support Squadron at Randolph AFB, TX. His diverse Air Force career has spanned career fields from missiles to manufacturing to contracting to education to personnel. He is married to Charlene French, and has three children-Megan, Todd, and Molly.

Preface

The motivation behind this paper is my deeply held belief that supervisors are inherently responsible for subordinate development. During my twenty years in the Air Force, I haven't seen this concept embraced by the Air Force, and I have rarely seen it implemented by individual supervisors.

The necessity for supervisors to develop subordinates in no way relieves subordinates of that responsibility. As with any education, the effort in the learning process will always remain with the learner. Although the ideas presented here can apply equally to enlisted members, officers, and civilians, this paper deals exclusively with officer development. Officers are leaders by definition. Thus, in this paper the terms **leadership development** and **subordinate development** are synonymous.

Any discussion of subordinate development by necessity includes the term **mentoring**. However, there are some drawbacks to using this term. Mentoring has many differing connotations and applications. For example, Air Force mentoring guidance assigns the direct supervisor as the mentor, while U.S. Marine Corp's guidance states a mentor should not be a direct supervisor. In addition, while the voluntary mentoring of one individual with great potential is an important practice, there is the stigma of favoritism

sometimes associated with mentoring. Together these drawbacks make it less than the ideal term for my use. However, Air Force policy dictates that supervisors will serve as the primary mentors for their subordinates. Therefore, I refer to the supervisory responsibility of subordinate/leadership development and mentoring interchangeably.

Finally, much has been written about two of the subjects discussed in this paper—mentoring and 360-degree feedback. It is not my intention to add to the body of knowledge of these topics, but to suggest better applications of these tools for leadership development.

This paper calls for the Air Force to hold officers accountable for the professional and leadership development of their subordinates. Accountability is the link between good intentions and a culture of leadership development. The paper discusses shortcomings in Air Force educational doctrine, outlines how ongoing Air Force efforts in leadership development provide unique opportunities for change, and offers suggestions on how to achieve an Air Force culture of continuous subordinate development.

Summary

The responsibility of developing subordinates rests with individual leaders and supervisors. This is a recurring theme found throughout leadership literature and speeches. The US Air Force clearly establishes subordinate development as a supervisory responsibility in top-level doctrine. However, in supporting doctrine and implementing guidance the intent of this top-level doctrine is not well implemented.

The Air Force has tried to require supervisors to develop their subordinates by building an Air Force Mentoring Program. This program has been inconsistently implemented, and lacks a mechanism to hold supervisors accountable. As a result, subordinate development has not been a high priority with many officers. There is a tremendous need to redefine the Air Force supervisor's role in leadership development.

Air Force leadership is revolutionizing leadership development through the Developing Aerospace Leadership (DAL) Program. DAL is based on the achievement of specific competencies associated with each assignment or experience. Because of the competency-based nature of DAL, this program offers an ideal opportunity to ingrain the supervisor's responsibility to develop subordinates into the very culture of the Air Force.

In addition, supervisory development of subordinates is not a key element of the current Air Force performance feedback system, nor does it lend itself well to traditional military top-down feedback. Thus, individual supervisors may receive little input with which to modify their leadership behavior. The 360-degree feedback process is a non-threatening, yet revealing method for emerging leaders to gain valuable insight into their leadership styles. Thoughtful application of 360-degree feedback would enhance the long-term development of individual leaders.

My conclusions are that the Air Force should significantly strengthen the supervisor's role in subordinate/leadership development by holding supervisors accountable; that subordinate development should be organized along the specific competencies articulated by DAL; and, that 360-degree feedback should be utilized as a tool at specific points in an officer's career to enhance leadership development.

Introduction

The importance of leadership development has long been recognized as vital to the success of any organization, and is a popular topic in leadership literature and speeches. General Creech, lecturing at Air War College in 1989, said, "The first job of a leader is to develop new leaders."[1] General Billy Boles, while addressing the topic of mentoring, left no doubt about the level of importance of developing subordinates, "The development of our people is second in importance only to the mission…"[2].

The individual responsibility of leaders and supervisors to develop their subordinates is also a recurring theme with those who study leadership. General Ron Fogleman, in a speech at Bolling AFB in 1995, said,

> "We all bear the responsibility to develop our subordinates and to help groom the next generation of Air Force leaders. It (mentoring) can open up communications within our service, break down barriers and create cultural change. It can also help develop air power professionals who understand how to employ air power and space forces to help meet the needs of future joint forces commanders."[3]

A recent Marine Corps award-winning article on leadership highlighted this theme as a basic characteristic of the Marine Corps,

> "His (Gen John A. Lejeune) concept of "teacher-pupil" is still used today. It was then and is still imperative today that seniors impart to their subordinates, especially those in leadership positions, their experience and knowledge so that those junior leaders will be able to rapidly improve themselves and their Marines. We apply these roles each day as Marine officers and leaders."[4]

Retired Army General E.M. Flanagen Jr., a past commander of the famous Big Red One stated it simply, "A good leader is a mentor to all his subordinates."[5] Finally, in his popular book, *Commanding an Air Force Squadron,* written to assist Air Force officers in their preparations for command, Col Tim Timmons offered the following as one of his pearls of wisdom, "Understand that a big part of your job is to develop the next generation of leaders."[6]

Whether authors are military or civilian, they routinely place the responsibility for developing subordinates not at the corporate (i.e., Air Force) level but with individual leaders. John W. Gardner, in his book *On Leadership*, focuses on the need for each individual leader to step up to the responsibility of teaching their subordinates, "Leaders teach. Teaching and leading are distinguishable occupations, but every great leader is clearly teaching—and every great teacher is leading."[7] He adds,

> "Perhaps the most promising trend in our thinking about leadership is the growing conviction that the purposes of the group are best served when the leader helps followers to develop their own initiative, strengthens them in the use of their own judgment, enables them to grow, and to become better contributors."[8]

Warren Bennis focused the reader away from a priority on course work and onto the necessity for leadership development in the work center in his book *On Becoming a*

Leader, "Leaders are not made by corporate (i.e., Air Force) courses, any more than they are made by their college courses, but by experience. Therefore, it is not devices , such as 'career path planning,' or training courses that are needed, but an organizations commitment to providing its potential leaders with opportunities to learn through experience…organizations tend to pay lip service to leadership development…"[9]

If not with corporate Air Force, the responsibility for leadership development must fall to individual officers. The Air Force does not, except in special non-line situations, bring officers directly into leadership positions from the civilian world. Thus, all future leadership is developed entirely within the organization. With the rigid military construct of strict rank structure and set promotion windows, the potential for any year group to produce strong leadership is limited by the innate characteristics and ensuing development of the officers within that year group. Therefore, an important Air Force objective should be to develop the largest number of qualified officers in each year group to maximize the pool of talent from which to select future leadership. With limitations on the availability of educational opportunities, resources, and operational experiences, the majority of individual development will take place in the

work environment under the guidance of the day-to-day supervisor. The degree to which this responsibility is taken to heart by every supervisor will have a tremendous impact upon the collective leadership development of each year group, and thus future Air Force leadership.

The concept of training subordinates to be prepared to move up to the next level of leadership is also visible in the leadership literature. Supervisors might well think of this as training subordinates to be capable of replacing them, because over time that is what happens in a closed system like the Air Force. Major General Perry Smith, who devotes a chapter to the subject of teaching in his book, *Taking Charge,* says,

> "It is a wise leader who takes the attitude of first grade teachers, who, at the end of the year, receive no thanks from the children, but know they have educated them well in their preparation for the next level"[10].

Regardless of what the literature says about the need for the individual supervisors to develop subordinates, it is only theory if it is not put into practice. In another award-winning article on leadership, this time from a younger Marine's viewpoint,

"Though mission accomplishment is the commanding officer's ultimate responsibility, mentoring—the teaching of junior officers—is one of his most important tasks. The distractions of our modern day Marine Corps have caused some to forget this basic responsibility of command. The problem lies not with recognizing the need for mentoring, but carrying out a dedicated program, specifically tailored to groom each junior officer for future service. Mentoring in a random or haphazard manner will not help junior officers. Commanders must develop a deliberate program and they should do so under the same procedures used to administer programs of professional military education (PME)."[11]

This Marine, who understands the problem is not in recognizing the need for mentoring but in carrying out a dedicated program, could have just as easily been talking about the Air Force.

Evidence of the Air Force not carrying out a dedicated program of subordinate development can be clearly seen in the writings of Col Dennis Drew. Col Drew spent over 20 years teaching Air Force officers in his various roles at Air University. From this position he was able to observe a greater cross section of officers than almost anyone else in the Air Force. He came to the following conclusions:

"My best estimate, based upon years of observation, conversation, and teaching, are that 80 to 90 percent of the officers entering ACSC and 50 to 60 percent of the officers entering AWC are essentially ignorant of the intellectual foundations of their profession." [12]

"Air Force efforts to promote informal, personal, career-long professional development have been very limited and largely ineffective."[13]

"Perhaps the basic problem in educating Air Force officers is cultural. The dilemma is that we need to reshape our culture without destroying the traditions that have served us well in the past. Somehow, we must make it culturally acceptable and professionally imperative to be air warriors well schooled in the theory, doctrine, and history of aerial warfare. How do we effect such a monumental cultural shift? It must start with attitudes and policies that go beyond simply encouraging intellectual development. Personal professional-intellectual development must become a requirement for every officer."[14]

Col Drew's phrase, "It must start with attitudes and policies that go beyond simply encouraging intellectual development" are right on the mark. Encouragement is insufficient because it lacks accountability.

Why hasn't the Air Force developed a culture where subordinate development is second in importance only to the accomplishment of the mission? To answer this question we need to start with Air Force educational and mentoring doctrine. But first it is helpful to review a few key characteristics of mentoring itself.

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[1]. Creech, General W. L., as quoted in AWC Research Report, "Should the Air Force Establish a Formalized Mentoring System", Lt Col Albert E. Lassiter and Lt Col Danny C. Rehm: 12.
[2]. Boles, General Billy, as quoted in U.S. Air Force Online News Release, 15 Sept 1999.
[3]. Fogleman, General Ronald R., "The Importance of Mentoring", transcript of remarks to the Air Force Cadet Officer Mentoring Action Program Annual Banquet, Bolling AFB, DC, 21 Oct 1995.
[4]. Lugo, Capt Frank E. Jr., "Marine Leaders: Masters of Many Roles", *Marine Corps Gazette*, Volume 82, Number 4, April 1998: 56.
[5]. Flanagen, General E.M. Jr., "Mentoring—Taking Time to Communicate", *Army*, Vol. 42, No. 9, September 1992: 61.
[6]. Timmons, Timothy T., Col., *Commanding an Air Force Squadron*, Air University Press, Maxwell AFB AL, December 1993: 57.
[7]. Gardner, John W., *On Leadership*, The Free Press, New York, NY: 18.
[8]. Ibid: 36.
[9]. Bennis, Warren, *On Becoming a Leader*, Addison-Wesley Publishing Company, Reading, MA, 1989: 182.

[10]. Smith, Maj Gen Perry M., *Taking Charge: Making the Right Choices*, Avery Publishing Group Inc., Garden City Park, New York, 1993: 152.
[11]. Gfrerer, Capt James P., "Where Have All the Mentors Gone? Mentoring: The Lost Part of Leadership", *Marine Corps Gazette,* Volume 80, Number 1, January 1996: 40-41.
[12]. Drew, Col Dennis W., "Educating Air Force Officers: Observations after 20 Years at Air University", *Airpower Journal*, Volume XI, No. 2, Summer 1997: 44, Note 1.
[13]. Ibid: 39.
[14]. Ibid: 42.

Key Characteristics of Mentoring

Kathy E. Kram is a noted expert and published author on the subject of mentoring. In her book *Mentoring at Work: Developing Relationships in Organizational Life*, she states that a number of research studies have grouped the functions a mentor performs into two categories—career functions and psychosocial functions. These functions are:

Career Functions	Psychosocial Functions
Sponsorship	Role Modeling
Exposure-and-visibility	Acceptance and Confirmation
Coaching	Counseling
Protection	Friendship
Challenging Assignments	

Career functions are defined as those aspects of a relationship that help with learning the ropes and preparing for advancement in the organization, while **psychosocial functions** are aspects that enhance a sense of competence, clarity of identity, and effectiveness to a professional role.[1] The applicability of specific functions in a relationship is situational. Kram says,

"Relationships at work are situated in an organizational context. It is essential to understand how an organization's structures and processes influence behavior in order to maintain those features that encourage supportive relationships and to modify those that impede them."[2]

The Air Force has assigned immediate supervisors as primary mentors. Therefore, following Kram's logic, some functions such as **sponsorship**, **friendship**, and to a degree **exposure-and-visibility** and **protection**, which better characterize the voluntary mentoring of an individual that is not a direct subordinate, will be less applicable in the Air Force approach. Other functions such as **coaching** (called teaching in some references), **role modeling**, **counseling** and to a degree **challenging assignments** will be more prevalent in a formal mentoring relationship where one mentors a subordinate.

Kram discusses both characteristics of and obstacles to mentoring. Several key concepts from her book that apply to Air Force type mentoring are listed below. These are presented with a paraphrase of her idea in italics, then an associated quote from her work:

1. *Lack of awareness of the important role that relationships play in career development is a major obstacle.* "A major obstacle to building relationships which provide mentoring functions is the lack of awareness of the important role that relationships play in career

development. Without this recognition, juniors will probably not seek out senior colleagues for support and guidance..."[3]

2. *A reward system that emphasizes results and does not also place a high priority on human resource development objectives creates conditions that discourage mentoring.* "In most organizations, this system rewards and recognizes performance and potential related to bottom-line results...Most individuals were unwilling to embrace the role of mentor when there were no organizational rewards for doing so."[4] This same concept was also well presented in an article entitled "Professional Development", addressing professional development in the Navy, "The fundamental cause of the current professional development problem is simple. When you do not identify those who have a certain attribute, you cannot reward them for having it. If there is no reward for having an attribute, people are indifferent to having it or not."[5]

3. *The culture of an organization—through its values, rules, rites, rituals, and the behavior of its leaders—can make mentoring and other relationships (seem) unessential.* "An organization whose leaders provide mentoring functions and reward subordinates for developing their subordinates, both modeling and reinforcing mentoring behaviors, establishes a culture that encourages mentoring. The

culture that most severely discourages mentoring activities is the one that is so short-term results-oriented that attention to employee development and relationships is considered a distraction from important work."[6]

4. *Mentoring has benefits at all levels.* "Each time an individual moves to a higher level in the organization, the necessity to learn the ropes reappears."[7] In another example, General Eisenhower, one of the most visible products of mentoring in our nation's history, received the most memorable portion of his much publicized mentoring after assuming the rank of major. Marine Corps doctrine also incorporates this idea, providing guidance for topics to be included in the mentoring of colonels and general officers.

5. *Performance management systems can encourage the use of mentoring.* "Performance Management Systems can encourage mentoring by providing a forum and specific tools for coaching and counseling—however, these systems are often absent, or introduced in a manner that causes individuals to avoid their use…if employees feel the system is ineffective, they are not likely to do the personal work that makes these activities beneficial."[8]

6. *Mentoring helps the mentor as well as the mentoree.* "A senior manager is enhanced by providing the coaching function. Passing on useful knowledge and

perspectives to a junior colleague confirms the value of one's experience. It is important to highlight how individuals in early career contribute to the development of their senior colleagues when they build mentor relationships with them."[9] Stephen R. Covey, in his popular book *The Seven Habits of Highly Effective People*, also supports this concept. He strongly recommends teaching ideas or processes to others because he maintains that teaching any concept is the best way to learn it.[10]

Kram also suggests strategies for the creation of a valuable mentoring system, categorizing strategies into two basic types--education and structural change. **Education** includes training and development efforts that create awareness and understanding of mentoring and its role in career development. **Structural change** is "a systemic effort to modify existing structures in the organization (including the reward system, performance management systems, or task design) in order to elicit different behaviors from employees."[11]

The following are selected mentoring strategies from Kram, presented in the same format as the previous concepts:

1. *Education can change the culture*. "Educational programs can increase understanding of mentoring and its role in career development...In addition to increasing knowledge, skills, and positive attitudes, (education) can

change the culture of the organization by reinforcing new values that give priorities to building supportive relationships…In a modified system, members must be informed about changes in expectations and encouraged to make mentoring activities a higher priority.[12] Investment in leadership development programs yields both short-term and long-term benefits because this training helps people to do their current job and also prepares them for future assignments.[13]

2. *Junior individual's education should focus on the benefits of mentoring.* "Here (early career) the primary agenda should be to educate individuals about the importance of relationships with senior colleagues who can coach, guide, and sponsor as one builds competence in a new career."[14]

3. *Middle career and late career individuals should receive different mentoring agendas.* "Research on mentoring and on life and career stages indicates that different agendas would be appropriate for each major age group or career stage."[15]

4. *Education must tie mentoring to organizational objectives.* "Unless the educational program is introduced with a clear rationale about how it fits with participants' job situations and broader organizational objectives, it may be viewed as interesting but superfluous."[16]

5. *Changes in the reward system and task design can change behavior.* "Structural changes stimulate and reinforce new behaviors in members. Thus, changes in the reward system encourage mentoring activities, and changes in task design encourage relationship building by facilitating interaction among individuals with complementary needs."[17]

6. *Feedback from peers and subordinates is important.* "Feedback from peers and subordinates on how well an individual manages relationships and provides development functions is an important source of information. This is a major departure from most performance appraisal systems and may be difficult to implement in authoritarian organizations. However, in settings where there is a clear desire to encourage mentoring processes…feedback helps individuals learn about their skills in providing developmental functions…"[18]

7. *Mentoring skill training is essential.* "Without skill training and a reward system that encourages mentoring alliances, participants become frustrated even if they are initially enthusiastic about the program."[19]

Kram's mentoring characteristics, obstacles, and strategies offer a logical method of evaluating the Air Force's approach to subordinate/leadership development.

CHARACTERISTICS/OBSTACLES:

1. Lack of awareness of the important role that relationships play in career development is a major obstacle.

2. A reward system that emphasizes results and does not also place a high priority on human resource development objectives creates conditions that discourage mentoring.

3. The culture of an organization—through its values, rules, rites, rituals, and the behavior of its leaders—can make mentoring and other relationships (seem) unessential.

4. Mentoring has benefits at all levels.

5. Performance management systems can encourage the use of mentoring.

6. Mentoring helps the mentor as well as the mentoree.

STRATEGIES:

1. Education can change the culture.

2. Junior individual's education should focus on the benefits of mentoring.

3. Middle career and late career individuals should receive different mentoring agendas.

4. Education must tie mentoring to organizational objectives.

5. Changes in the reward system and task design can change behavior.

6. Feedback from peers and subordinates is important.

7. Mentoring skill training is essential.

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[1]. Kram, Kathy E., *Mentoring at Work: Developmental Relationships in Organizational Life*, University Press of America, Lanham, MD: 22.
[2]. Ibid: 15-16.
[3]. Ibid: 165.
[4]. Ibid: 161.
[5]. Grassey, Lieutenant Commander Thomas B., U.S. Naval Reserve, "Professional Development", *U.S. Naval Institute Proceedings*, No. 103, August 1977: 37.
[6]. Kram: 164 and 165.
[7]. Ibid: 167.
[8]. Ibid: 163.
[9]. Ibid: 29 and 168.
[10]. Covey, Stephen, *The 7 Habits of Highly Effective People*, Books-on-Tape: Tape 1.
[11]. Kram: 167.

[12]. Ibid: 167 and 179
[13]. "Heirs Unapparent", *HR Magazine, Society of Human Resource Management,* Feb 1999.
[14]. Kram,: 168.
[15]. Ibid.
[16]. Ibid: 171.
[17]. Ibid: 173.
[18]. Ibid: 178.
[19]. Ibid: 192.

Air Force Subordinate Development

Air Force Doctrine for Education and Training, Air Force Doctrine Document 2-4.3, 9 September 1998, emphasizes the Air Force's belief in the importance of life-long study. However, while appropriately highlighting the individual's responsibility for continuous education, the supervisor's responsibility that leadership literature and speeches highlighted as critical to officer development is a weak link at best. Consider the following three excerpts (underlining is mine):

"At the very foundation of the tremendous capabilities of aerospace power is education. Only quality education achieved through professional development can ensure the critical thought processes necessary for sound decision making."[1]

"Individuals are responsible for their continued education. Outside of formal programs, individuals <u>may</u> continue their development through professional reading, individual or group study, and peer discussion. While realizing that unit workloads may preclude some educational opportunities, commanders <u>should</u> ensure individuals are afforded the opportunity to achieve education…commanders <u>can</u> further their subordinates' development by ensuring a continuing education process through mentoring programs that complement formal education programs…"[2]

"Mentoring and informal and individual education programs <u>should</u> begin during accession and are most effective when consistently pursued across the entire continuum."[3]

The concept that the majority of a future leader's development occurs in a working environment, that this

development is a priority second only in importance to the mission, and that supervisors are responsible for the development of their subordinates are not strongly emphasized in our top-level educational doctrine.

AFDD 2-4.3 also states, "Episodic exposure to education reduces learning effectiveness, narrows perspective, and hampers critical thought."[4] Yet, in today's Air Force, formal PME is episodic in nature. AFDD 2-4.3 does not put much emphasis on the "most critical" portion of education—that which occurs between formal PME schools. What the preceding excerpts fail to say about the Air Force's commitment to leadership development in the workplace speaks volumes about the Air Force's view on subordinate development. There is a real need to emphasize the supervisor's role in subordinate development. Kram's warning that the culture of an organization can make mentoring seem unessential is applicable, as seen in the lack of emphasis of the supervisor's role in subordinate development in our basic doctrine.

Supervisory responsibility for subordinate development is implemented through Air Force mentoring. The Air Force definition of a mentor is "a trusted counselor or guide", and mentoring is "a relationship in which a person with greater experience and wisdom guides another person to develop both personally and professionally."[5] It is Air

Force policy that supervisors will fill the primary role of mentor for subordinates.

Air Force Policy Directive (AFPD) 36-34, Air Force Mentoring, dated 1 November 1996 states that "This directive applies to all Air Force officers with special emphasis on the company grades."[6] However, by paragraph 2 the directive drops any further reference to all officers, and only requires the establishment of a mentoring program for company grade officers (CGOs). Here Kram's characteristic of mentoring having benefits at all levels, and her strategy of setting different agendas for differing career levels are not yet part of the Air Force system.

AFPD 36-34 clearly states, "Mentoring is a fundamental responsibility of all Air Force Supervisors", and delineates that mentoring covers, "career guidance, professional development, Air Force history and heritage, and knowledge of air and space power…knowledge of the ethos of our profession, and understanding the Air Force's core values of integrity, service, and excellence."[7] AFPD 36-34 also reinforces the idea, "career development and air and space power must be addressed."[8]

Conspicuously absent from this mentoring directive is a requirement for education or training of mentors or subordinates on the mentoring process. How are subordinates to become aware of this mentoring system? How are

supervisors supposed to gain the skills for this critically important task? If a subordinate is not receiving guidance from a supervisor, how is anyone to know? Many of Kram's strategies that involve education and training of the participants are not present in the Air Force program.

Two attachments to the AFPD 36-34 are designed to collect measurements of the success of the program. One metric measures the percentage of CGOs that know there is an Air Force Mentoring Program, and the second measures the percentage of CGOs who are satisfied with the Mentoring Program. I was unable to determine if the data had ever been collected. But the mere existence of a metric to determine what percentage of CGO's knows there is a mentoring program, while there is simultaneously a mandatory requirement for every supervisor to be a mentor, is a strong indication that the program was not well implemented. As further evidence, I conducted a very informal poll of several previous squadron commanders and found that few even know of the existence of the mentoring guidance. Kram's warning about lack of awareness of the importance of mentoring may well apply to the Air Force. Certainly few of her recommended educational strategies have been implemented.

The Air Force does support mentoring with a range of materials that can be used in the process. This is evident

from a review of the Air Force Personnel Center's (AFPC) Homepage at: http://www.afpc.randolph.af.mil/careercorner/1st_line-sup.htm. But how many supervisors actually draw information from this site in order to mentor their subordinates? The process does not appear to hold anyone accountable for this information.

AFPD 36-3401 is implemented by Air Force Instruction (AFI) 36-3401, Air Force Mentoring, 1 July 1997. **COMPLIANCE WITH THIS PUBLICATION IS MANDATORY** is the direction on the top of the instruction. There is no reference to this program applying to all officers, but instead we find that "It applies to all commanders and supervisors/raters of Air Force company grade officers."[9] Commanders and supervisors are directed to "encourage" subordinates to read and comprehend air and space power literature".[10] It does assign the immediate supervisor or rater as the primary mentor for each subordinate, and makes them responsible for a robust program. However, it states the program "was established to bring about a cultural change in the way we view professional development…".[11] A leadership development program whose published goal is to change "views", but lacks any system of accountability, understandably falls short of having a significant impact on actions.

Rather than providing information such as guidance on

how to implement a program, delineating subordinate and supervisory responsibilities, or outlining accountability and feedback processes, the AFI deteriorates into a laundry list of topics from Professional Associations to Promotions to Awards and Decorations. While these are all important processes with which an officer should be familiar, elements that would force supervisors to comply with the guidance are conspicuously missing.

Finally, the AFI goes on to emphasize that "they (subordinates) should understand that they will have had a successful career if they make lieutenant colonel". While again this is a valid point, as part of subordinate development it seems out of place. If the Air Force intends to develop everyone to the fullest potential, this advice may even be counter-productive. The unintended message here is for subordinates not to set goals too high so they will be happy when they achieve the lower goals.

I attempted to contact several MAJCOMs to determine how they had implemented the Air Force mentoring guidance. In response to inquiries to HQ ACC about their mentoring program in March 2000, I was told their AFI was not yet complete. A call to HQ AMC resulted in a similar answer. However, as might be expected with an educationally based topic, AETC had produced AETC Instruction 36-101, 22 April 1996, Guide to the AETC Mentoring Program. This document

goes a long ways toward implementing Air Force leadership's vision of making every supervisor a mentor. The AETCI stipulates,

> "Mentoring (is) an integral part of a supervisor's daily leadership activity and helps develop well-rounded, professional, and competent subordinates. It applies to all commanders and supervisors of AETC military and civilian personnel."[12]

> "(Mentoring) is a professional development program designed to help each individual reach his or her maximum potential. Mentoring is more than just career guidance, however. It's also Air Force history and heritage and air and space power doctrine."[13]

This guidance even goes a step further and provides an AETC Form 906, Mentoring Feedback Worksheet for professional development recommendations and career planning, along with suggested areas in which to develop the subordinate. Clearly, AETC has a basic framework in place that could help in the effort to have the supervisor be personally involved in the development of each subordinate. But is this guidance being followed within AETC?

Having served as a squadron commander, I know if a subject is important enough for the IG to inspect closely, it will get plenty of leadership attention. Therefore, I called the HQ AETC/IG and asked the inspection division about their approach to inspecting the mentoring program. The answer I received was that mentoring or subordinate development was not a significant part of their inspection. Once again, there appears to be no clear procedures for

holding officers accountable for complying with the mandatory nature of the AETCI.

Looking specifically at the necessity of teaching supervisors mentoring skills, I collected a sampling of pre-squadron commander course agendas from MAJCOMS. Neither ACC, AMC, nor AETC schedules any discrete time in their commander's courses for subordinate development or mentoring--the "the second most important part of leadership after the mission". Although related discussions certainly occur during these courses, the lack of specific training in this area is another indicator the Air Force has not embraced the importance of the supervisor's role in subordinate development. In contrast, The Marine Corps mentoring program, covered in MCRP 6-11E, *Mentoring*, 13 Oct 1999, cautions that a command sponsored mentoring program should "train the participants to understand their role(s)"[14], and requires the mentor and mentoree "discuss and set goals, decide when to meet, determine when to measure progress…then write a plan to meet the time frame."[15]. While it is certainly possible in each of the above instances that my attempts to uncover information were stymied by staffers who were too busy with other issues, it does appear that Air Force mentoring is not implemented well or taught frequently at the MAJCOM level.

Does Air Force doctrine require all supervisors to

mentor their subordinates and be responsible for their personal, professional, and leadership development? The answer to this question is yes. Is that doctrine thoroughly incorporated into supporting guidance? Is there a system in place that holds supervisors accountable for the fulfillment of this responsibility? Has the existence of this doctrine resulted in a culture of supervisors working hard to develop their subordinates? Do the majority of Air Force officers know the mentoring guidance exists and what it says? My limited investigations and my experience indicate the answer to these last few questions is a discouraging no.

Basic Air Force educational doctrine, AFDD 2-4.3, says that "Education programs must begin with a systemic approach. Systemic programs provide a means to establish objectives, measure achievement, evaluate effectiveness, and provide for feedback. Whether formal programs are centrally developed or individual programs are developed to meet individual interests, a systemic approach provides the best education program."[16] Mentoring appears to be an educational program the Air Force has implemented without requiring that it comply with the normal rigors of this educational doctrine.

Appling Kram's characteristics and strategies to the Air Force mentoring program, it appears that:

CHARACTERISTICS/OBSTACLES:

1. Lack of awareness of the important role that relationships play in career development is a major obstacle.
   Air Force Mentoring: Officers may conceptually know the importance of mentoring, but this has not transferred into practice.

2. A reward system that emphasizes results and does not also place a high priority on human resource development objectives creates conditions that discourage mentoring.
   Air Force Mentoring: There is no visible reward for mentoring.

3. The culture of an organization—through its values, rules, rites, rituals, and the behavior of its leaders—can make mentoring and other relationships (seem) unessential.
   Air Force Mentoring: Air Force leadership strongly supports the concept, but it has not become part of the culture.

4. Mentoring has benefits at all levels.
   Air Force Mentoring: Mentoring is currently restricted to Company Grade Officers. (This is scheduled to change.)

5. Performance management systems can encourage the use of mentoring.
   Air Force Mentoring: The Air Force does not tie a supervisor's performance in mentoring to the performance management systems.

6. Mentoring helps the mentor as well as the mentoree.
   Air Force Mentoring: Where mentoring is accomplished, this is true.

STRATEGIES:

1. Education can change the culture.
   Air Force Mentoring: There is little emphasis on education.

2. Junior individual's education should focus on the benefits of mentoring.
   Air Force Mentoring: There is little emphasis on education.

3. Middle career and late career individuals should receive different mentoring agendas.
   Air Force Mentoring: There is currently no program for mentoring above Company Grade Officers. (This is scheduled to change.)

4. Education must tie mentoring to organizational objective.
   Air Force Mentoring: There is little emphasis on education.

5. Changes in the reward system and task design can change behavior.
   Air Force Mentoring: Discrete rewards are not apparent.

6. Feedback from peers and subordinates is important.
   Air Force Mentoring: No formal system for peer/subordinate feedback exists.

7. Mentoring skill training is essential.
   Air Force Mentoring: There is no program for formal training.

Mentoring in the Air Force, while having the capability to accomplish significant leadership development and to ingrain this process into Air Force culture, is characterized by insufficient doctrine and inconsistent application. From the paramount nature of a supervisor's responsibility for subordinate development found in literature and speeches, to the important nature articulated in our doctrine, to the somewhat ambiguous treatment of this subject in our AFIs, to the absence of it in squadron commanders' training courses, to the infrequent practice of these ideas in the field, one can see how a powerful concept is lost in the world of competing priorities. There is an

urgent need to redefine the Air Force supervisor's role in leadership development.

The good news is that current Air Force leadership is taking bold steps toward strengthening Air Force leadership development.

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[1]. Air Force Doctrine Document 2-4.3, Education and Training, 9 September 1998: 6.
[2]. Ibid: 7.
[3]. Ibid: 11.
[4]. Ibid: 10.
[5]. Air Force Instruction 36-3401, Air Force Mentoring, 1 July 1997: 1.
[6]. Air Force Policy Directive 36-34, Air Force Mentoring Program, 1 November 1996: 1.
[7]. Ibid: 1.
[8]. Ibid: 2.
[9]. AFI 36-3401: 1
[10]. Ibid: 2.
[11]. Ibid: 1.
[12]. AETC Instruction 36-101, Guide to the AETC Mentoring Program, 22 April 1996: 1.
[13]. Ibid: 1.
[14]. Marine Corps Regulatory Pamphlet 6-11E, Mentoring (Coordinating Draft), 13 October 1999: 3-6.
[15]. MCRP 6-11E: 3-3 and 3-4.
[16]. AFDD 2-4.3: 9.

Developing Aerospace Leaders (DAL)

Few things are as vital to achieving a nation's security objectives as strong military leadership. While there have been some truly great leaders in Air Force history, they appear to have emerged more from informal mentoring, innate abilities, or sheer willpower than from a coherent development program. There is no guarantee the Air Force will continue to be so lucky in the future. The Air Force currently relies on multiple, virtually autonomous systems to develop its officer corps in areas such as accessions, professional military education, exercises and deployments, assignments, and mentoring. As a result, strong functional stovepipes control both short-term officer career decisions and long-term development. This means the Air Force does a superb job of providing functional expertise for today's mission, but it could do a much better job in the long-term development of officers as Air Force-wide contributors. This is especially true when development is needed in more than one functional area. Fully developing all Air Force members and growing strong leadership are as important to the Air Force's future as fielding the next new weapon system. Therefore, a comprehensive program for leadership development is of vital national importance.

THE NEW DAL SYSTEM

The Air Force is already hard at work on a project for revolutionary advancements in leadership development. The existence of this effort is in itself a telling indication of the strength of the Air Force as an institution. The project is called DAL, short for Developing Aerospace Leaders. It is founded on the belief that effective Air Force leadership for the future will result from guided professional development over a broad array of experiences and challenges. DAL is using the Air Force's vision of the future battle environment to help bring tomorrow's required leadership competencies into focus.

That future vision indicates the Air Force cannot continue to produce the strongest possible officer corps by honing each officer's expertise in only one functional area. Rapidly advancing technology will make the future battle environment far more information-intensive, and expertise in a single weapon system or functional area will be necessary, but not sufficient. Some pilots will need operational knowledge of space capabilities, some space/missile officers will need experience in AOC operations, some acquisition officers will need a logistics background, some intel officers will need comm skills, etc. But developing officers with multiple specialties is not enough. The Air

Force needs leaders with a thorough knowledge of aerospace power in all career fields. Most of all, the Air Force will need war fighters who can blend their knowledge of the capabilities of multiple functions with their operational experience to allow the Air Force to reach its maximum potential.

Basically, DAL is aggressively rethinking and realigning the factors that contribute to the growth of Air Force leaders. Its charter spans the entire spectrum of an officer's career, from initial accession through senior leadership assignments. Senior Air Force leaders are so committed to revitalizing leadership development they have established a new DAL Development Office at the Air Staff. Although the DAL office resides within the DP community, it has representation that cuts across functional areas. One senior retired general officer justly described this effort as the most important single program he has seen in his 35-plus year association with the Air Force.

COMPETENCY BASED

The developers of DAL are being extremely careful to design a system that incorporates the key elements responsible for the great success of the Air Force to date. This means Air Force core values will never be compromised as the bedrock upon which the future force is built; the

technological superiority so instrumental to AF success will remain the priority; and the basic tenets of aerospace power developed over years will not be replaced. The inherent belief that successful military operations depend upon the dominance of aerospace power is fundamental to the effort.

DAL is focusing on developing specific competencies and combinations of competencies future Air Force leaders will need. DAL uses "competency" in the broadest sense to capture the range of identifiable characteristics that enable leadership success. These include not only traditional core competencies such as expertise in air superiority and global attack, and core values such as integrity first and service before self, but they encompass skills and knowledge from all types of educational, training, exercise and operational experiences. For organizational purposes, the competencies are segregated into broad categories relative to aerospace. The categories include competencies in functional areas, operations, leadership, organization, strategy, technology, and perspective, as well as experiences such as PME, deployments, education, prior jobs, and tours in specific locations like OSD or PACAF.

Although a master competency list has not yet been fully developed, one might possibly include:

- **Category: Functional Area**
  - Competency: Logistics
  - Competency: Civil Engineering
- **Category: Aerospace Perspective**
  - Competency: Air Force Heritage and Culture
  - Competency: Aerospace Fundamentals
- **Category: Aerospace Organization**
  - Competency: Joint Battlespace
  - Competency: Air Force as a Total Force
- **Category: Aerospace Operations**
  - Competency: Expeditionary Operations
  - Competency: AOC Organization and Operations
- **Category: Aerospace Leadership**
  - Competency: Command
  - Competency: Core Values
- **Category: Prior Jobs**
  - Competency: Squadron Commander
  - Competency: Wing Commander

To focus development on the necessary competencies, DAL will shift the Air Force away from those multiple, autonomous accession, PME, exercise/training, and assignment systems toward a fully integrated system covering all

aspects of officer development. The eventual master list of all relevant competencies will provide the structural framework upon which each of the previously autonomous processes will be realigned. For the first time, every aspect of an officer's career, beginning with initial selection to compete for a commission, will be completely integrated to maximize the individual's potential.

FUNCTIONAL CATEGORIES

To facilitate more relevant developmental career paths, DAL has organized the officer corps into four broad categories: **professional, core specialist, aerospace specialist, and generalist.**

The **professional** category includes career fields such as Judge Advocate, Chaplain, Contracting, Medical Specialties, and possibly Financial Management. These jobs don't fundamentally change whether the country is at peace or at war. Civilian authorities often certify the individuals serving in such professional career fields.

Core specialists include career fields that deploy during wartime, both rated and non-rated. Basically, all Air Force officers who are not in the professional category begin their careers as core specialists. This is the "seed corn" from which top leadership will grow. These also include officers who will spend the majority of their

careers on flight lines, in maintenance depots, or in missile silos. They are the technical wizards in their functions. Examples of core specialists are lieutenants working in missile maintenance, and Lt Cols who have spent their entire careers in aircraft maintenance.

Aerospace specialists are officers who have broadened after becoming expert in their chosen functions. They were originally core specialists, but they have subsequently held assignments outside of their narrow functional areas and gained a broader aerospace perspective. Examples would be majors who have succeeded in both missile maintenance and aircraft maintenance, or pilots with knowledge of both flying operations and space operations.

The **generalist** category is made up of officers who have gained tremendous breadth in the development, employment and support of aerospace operations. These are previous aerospace specialists who have repeatedly demonstrated success in diverse challenges. They are the warfighters from whose numbers the combat commanders' and key staff jobs will be filled. Examples would be Colonels serving as wing commanders, or senior officers working on national military policy issues.

Some competencies are obviously more relevant to one category of career fields than to others. For example, leadership of a deployed unit may be critical for a core

specialist such as a security forces officer, but normally will not apply for a professional like a dentist. However, a large percentage of the total competency list will be applicable and achievable by all officers.

DEVELOPMENT TOOLS

There are a variety of ways to develop competencies. DAL refers to these as "tools," because they are used to mold, shape or refine an officer. Basically, five tools are available: **accessions, assignments, professional military education (PME), training/exercises and deployments, and mentoring.** Each tool has the capability of developing specific competencies. Remember, the goal is not to collect competencies, but to ensure each individual is developing in the areas best for their growth, while the Air Force is developing an officer pool with the needed mix of competencies.

Accessions is the vital foundation upon which all ensuing career development builds. Separate sources of commission must look for the exact same characteristics--those that are proven indicators of leadership performance. Currently, sources of commission are producing officers with stovepipe-oriented career expectations. DAL will task commissioning sources to instill a broader aerospace leader mindset. This will by necessity include a better

understanding of Air Force heritage, as well as a greater appreciation for the application of aerospace power. These two competencies will be among those credited to the officer's record, at least at the introductory level, upon graduation from the commissioning program.

All sources of commission will ensure their professional development curricula support the DAL-assigned objectives. This does not mean all officers should be clones or that unique individuals will be eliminated--individuality is often a strong indicator of leadership. But all young officers must have the same complement of entry-level competencies to start their careers.

Assignments will always be one of the most powerful tools in the development toolbox. However, the emphasis will shift from making an assignment to fill an Air Force need, to making an assignment that will also develop the competencies the individual and the Air Force will need for the future.

Each job will have two sets of associated competencies. One will define the prerequisites for taking the position, and a second set will be credited to any individual who successfully completes the assignment. As an example, a squadron commander's position may include the competency of communications as a prerequisite for the assignment, while

awarding a competency in command experience upon successful completion of the tour.

At assignment time, an officer's personal list of earned competencies will be a vital part of determining their next assignment. As officers move from job to job, their personal competency list will grow. To keep the best of the old system, local commanders will continue to be intimately involved in the assignment process.

Clearly, some competencies will only need to be achieved once in a career. Graduation from a commissioning source will bring all new lieutenants credit for the competency of core values. As long as these officers continue to serve honorably, their continued understanding and acceptance of core values will be understood. However, many competencies lend themselves to levels of growth associated with further assignments or experiences. Therefore, some competencies will have levels of achievement associated with them. For example, successful squadron commander might receive credit for achieving level 1 in the competency of command, a group commander level 2, and a wing commander level 3.

Managing people as a resource to maximize their growth will be a significant change. At times, hiring officials will be asked to accept less than the most qualified candidate for their position in order to provide an

opportunity for a subordinate officer to grow. In fact, they will be expected to do this for the betterment of the Air Force. In addition, some of the sharpest individuals in each career field may be presented the opportunity to leave their comfort zones and jump into areas with which they are not familiar, for the long-term benefit of the Air Force. These short-term risks will allow individuals to achieve greater breadth, while helping the Air Force develop an officer corps that has a broader mix of experiences.

Professional Military Education (PME) will continue to play a critical role in officer development. Each level of PME will be held responsible for completing the relevant portion of the total competency list that best lends itself to an academic environment. The Aerospace Basic Course will ensure all lieutenants start from the same solid foundation. The Air Command and Staff College curriculum will not only educate majors, but will lay the necessary groundwork for accomplishing Senior Service School objectives. We will be able to view the collective PME curriculum from the first day in a commissioning source through graduation from Air War College as one dynamic, integrated continuum. With a large portion of officer's required competencies being completed through PME and training, the competency of education and training will be of increasing importance

after DAL. We must have some of the brightest minds guiding and teaching our officers.

Training, exercises, and deployments are some of the most powerful tools available for leadership growth. Prior involvement with contingencies or exposure to combat environments will be an important differentiator when selecting leaders of our future Air Force. However, real-world contingencies are not predictable, and direct involvement is usually limited to a very small percentage of the active force. Therefore, extensive training in similar environments or participation in significant exercises will be the available alternative for developing like competencies. Warfighting-related competencies may be awarded for the right type of participation in training, exercises, and deployments. In the future, an officer's official records will track meaningful participation in training, exercises, and deployments much like we track educational course completion today.

Of necessity, there will be some husbanding of these opportunities for officers whose capabilities will allow them to compete for the highest levels of leadership. Careful cultivation of the right types and numbers of officers will ensure a healthy population of leaders at each level. This does not mean that if you are not the best fighter pilot, you will not lead somewhere in the Air Force

of tomorrow. DAL is designed to allow the greatest number of people to gain valuable exposure and experience to strengthen the overall institution of the Air Force. Keeping the best of today's system means ensuring there will be sufficient leadership opportunities for each functional area. [1]

Mentoring is fundamental to good leadership. With officers soon achieving a greater breadth of experience, supervisory responsibility for subordinate development will become even more challenging, and more crucial to achieving overall Air Force objectives. Mentoring will be a very viable tool for awarding competencies. The skill of mentoring will be the bedrock competency that enables this tool to be fruitful. As this paper has suggested, the current Air Force mentoring program does not hold supervisors accountable. Assignment of specific competencies to be accomplished through mentoring can enhance the current system, bringing needed vitality to the process. But success requires an enduring personal commitment on the part of both the mentor and the mentoree. Supervisors who understand the objectives and benefits of DAL will work to mature each of their subordinates along the younger officer's individual path of development. A system of analyzing, crediting, and tracking mentoring-awarded competencies must be developed. When followed judiciously,

a strong mentoring program will instill a culture of continuous self-development. More explicit recommendations will be provided in the section of this paper entitled Leadership Development Recommendations.

SUPPORTING CHANGES

Implementation of this program will take strong support and participation from the functional communities. Sets of supporting competencies will be developed for each functional area. For instance, at the top level the Air Force will track functional expertise in logistics as one competency. When logistics officers complete their initial and subsequent logistics assignments, their records of logistics competency will be upgraded. However, the competency of logistics credited through the personnel system would not tell the logistics community enough about the individual. The logistics community will need to track experience in supply, transportation, aircraft or missile maintenance, logistics planning, or contracting, for example. The degree to which the functional communities support the DAL program will have immense impact on program success. As the functional communities learn to work with this new system, they will be far better prepared to fulfill their fundamental responsibilities of advising and counseling their functional officers on career progression.

As with any major change, the need to set quantitative goals and carefully measure the results is paramount for program integrity. The DAL team is developing specific measures of merit by which the impact of the program can be monitored. Air Force planners will be able to define future officer requirements in terms of different combinations of competencies. The Air Force will develop each cohort of new lieutenants with one eye on what the group must look like in ten, twenty, and thirty years. Both the future needs of the Air Force, and the immediate growth of the individual will be revisited with each new assignment, deployment, or school. If the Air Force believes it will need 20% of its fighter pilot population to have knowledge of space systems by the year 2015, it can make adjustments in 2005 that will achieve that mix 10 years later.

BENEFITS

The benefits for the Air Force of implementing this type of system are immense, as are the long-term risks of continuing with the current approach to leadership development. As the youngest of all the services, the Air Force is still developing its corporate culture. An exciting combination of honor, bravery, advanced technology, high skills, and a promising future, all play into this emerging culture. Everyone in the Air Force feels it, but

it is hard to describe, and hard for others outside the Air Force to grasp. One of the greatest benefits will be that the DAL program will force officers to focus on both the rich history of the Air Force, our heritage, as well as our future operational requirements. This will help us better define our culture.

The following, then, are some of advantages the Air Force can hope to gain through DAL:

- Long-term officer development will be directly based on the future battle environment
- The Air Force will put more emphasis on what is right for each individual rather just today's needs
- Every aspect of an individual's career will be built to support the grand scheme of developing the strongest Air Force leadership, regardless of the level
- New lieutenants will all have the same baseline of competencies regardless of commissioning source
- ABC will ensure all lieutenants begin with the same aerospace mindset
- Mentoring will have the opportunity to become the strong development tool it is capable of being
- The new system will retain the most successful characteristics of the past

- The Air Force heritage will be appreciated and understood by all officers
- Assignments officers will have much greater detail available about each individual and each job
- Force planners will have discrete competency-mix goals to assist in the development process
- All professional military education will be closely coordinated along a continuum of desired learning objectives that cover an entire career
- Good people will be forced to grow in areas outside their comfort zone for the betterment of themselves and the Service
- Today's stovepipe mentality will be replaced with an aerospace mindset within all functional areas
- The emerging Air Force culture will become better defined and more ingrained
- Valuable operational experience will be focused on officers who have the most promise for leadership
- Traditional square fillers like master's degrees will be measured in terms of their usefulness
- Air Force senior leadership will have clear measures available early in the development cycle
- Supervisors will have a universal framework for evaluating and grooming subordinates

- The groundwork will be set for better commonality in the future among the Total Force
- The Air Force will have aerospace leaders who can better compete for the top leadership positions available to Air Force officers

The Air Force as an institution is aggressively pursuing its responsibility to develop its officer corps. This very fact reflects the institutional strength of the Air Force. DAL's competency-based leadership development approach is a quantum leap forward from the today's piecemeal system. Mentoring, the Air Force's chosen method of assigning supervisors the subordinate development responsibility, can be a tremendous asset to this effort if the current system is strengthened. At the turn of the millennium, DAL is the most important change we can make in the Air Force. Because superior aerospace power will continue to be the key to victory in warfare, this project will have an immense effect on our Nation's ability to conduct warfare in the future.

MARCH 2005

"The strong and salutary characteristics of both Lee and Grant should live in history as an inspiration to coming generations. Posterity will find nobler and more wholesome

incentive in their high attributes as men than in their brilliant careers as warriors"[2], read 1Lt Steve Hicks completing his reading of *Grant and Lee: A Study in Personality and Generalship* by Major General J. F.C. Fuller. This was the last book on his mandatory reading list for third year Air Force officers. As he set the green book on his nightstand and snapped of the light to go to sleep, he thought through the author's viewpoints, and framed in his mind how to explain his opinions to his supervisor, because he surely would be asked about them in the next few days. He believed it was Fuller's insightful presentation of the differences between tactical genius and the mastery of grand strategy that made the book worth reading. But his flight commander, Capt Jim Cobbs, had suggested the author's descriptions of the individual personality characteristics of such great men were the true value in the book. Although their discussion would be brief, as they usually were, it was bound to be interesting……

Capt Jim Cobbs was a little frustrated. Working with numbers was not something that came naturally to him, and his degree in American History had not forced him to struggle much with mathematics. He was a major-select, and had excelled at every one of his Air Force assignments. In fact, he was hoping to compete for an ops officer's job when

he finally pinned. But this squadron budget drill was killing him! The odd part was that he wasn't even in charge of pulling together the squadron budget for the commander—that was the current ops officer's task. But his squadron commander, Lt Col Scott McClelland, assigned Capt Cobbs to work with the ops officer on the budget to complete Cobb's individual development plan. The building of a budget was a competency all squadron ops officers earned. Lt Col McClelland worked hard at exposing his flight commanders to the competencies the DAL system credited to ops officers. He was not about to let his flight commanders complete their tours without knowledge of budgeting, disciplinary actions, civilian management, and much more.

Lt Col McClelland had five folders spread out on top of his desk. Normally the information in the folders was on his computer, but he knew it would be easier to explain to his group commander in hard copy. The meeting he was headed to was actually unrelated to the folders, or at least not directly related. The meeting was about dealing with unions. The group commander, Col Holt, had just returned from the wing commanders office, Brigadier General John Levandowski, where he had gained some very useful insights into unions. He knew this information would be helpful to any group commander, so he immediately called in

his squadron commanders to review it with them. Col Holt believed his squadron commanders must be well prepared to be group commanders when they completed their squadron command tours. Col Holt also believed if his squadron commanders did not take the responsibility of developing their subordinates seriously, they were failing in their leadership role.

Lt Col McClelland brought his folders to the meeting because they contained his subordinates training plans, and Col Holt was sure to ask about them--he always did. Lt Col McClelland had learned both the importance of and the methods for subordinate development in his MAJCOM pre-command training course. The individual training plans he maintained contained among other things the list of competencies each had obtained thus far in their careers, the competencies gained by the next level of leadership (ops officer), the professional reading list required for their particular year of service, and a list of special topics for this quarter.

Lt Hicks, Captain Cobbs, Lt Col McClelland and Col Holt were part of an Air Force where a doctrine of individual responsibility for growing future generations of Air Force leadership had taken firm hold as part of the culture.

Do the previous three scenarios sound like normal day-to-day goings on in the Air Force today? They should.

The evolving DAL Program offers the perfect opportunity to improve the system, and hold supervisors accountable for subordinate development. The right assignment provides the opportunity to develop, but an individual learns and develops everyday on the job under the supervisor's eyes.

In addition, it is critical that subordinates understand the benefits of the process. If supervisors routinely ignore these responsibilities or are inexperienced at subordinate development, the subordinate will miss opportunities in the short run, and the Air Force will suffer in the long run. Therefore, there must be a feedback system in place that helps facilitate an individual supervisor's growth. The traditional military top-down approach to feedback does not lend itself well to situations where the observer of the supervisor's performance is the subordinate. There is a real need for a new approach to feedback to support leadership development.

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[1]. Link, Maj Gen Charles, DAL Executive Steering Committee Update Briefing, 7 Jan 2000.

[2]. Fuller, General J.F.C, *Grant and Lee: A Study in Personality and Generalship*, Indiana University Press, Bloomington, IN, 1957: 283.

Feedback For Supervisors

One of Kram's strategies for successful mentoring is the importance of feedback from peers and subordinates. As with all leadership skills, supervisors apply their subordinate development skills in their relationships with their subordinates, yet supervisors are responsible for evaluating the skills. Although subordinate officers may not yet be very experienced with mentoring, after initial training they will be sufficiently knowledgeable of the intended outcome to add great value to the process.

The Center for Strategic and International Studies (CSIS) recently published an article suggesting there are significant leadership problems within the military officer corps. The article did, however, emphasize the importance of effective military leadership. CSIS said "the most powerful and direct influence on organizational climate, and, eventually, on culture comes from within the officer corps."[1] While discussing the implications advancing technology has upon the military's organizational structures, the CSIS article suggested:

> "Rapid vertical and horizontal disseminations of information will change patterns of command and staff relationships…The armed forces will require more sophisticated models of leadership to exploit properly the enhanced capabilities of their units…Better systems are also needed to take the pulse of organizational climates routinely throughout the military."[2]

While this does not directly call for a new form of feedback, it does indicate that present leaders might have trouble analyzing leadership styles in the new environment. Leaders and managers considered successful in the past may not have the competencies necessary to succeed in today's more complex environment.[3] One of the things it may help to change is reliance on top-down feedback alone. Research conducted by the Naval Postgraduate School for the U.S. Army Reserve found there is a need for commanders to receive regular feedback on aspects of their leadership and recommends ratings by unit members.[4]

CHARACTERISTICS OF 360-DEGREE FEEDBACK

A feedback system that has gained popularity in recent years is 360-degree feedback. 360-degree feedback is a human resource tool for providing individual leaders with the information they need to both understand the perception others have of their leadership style, and to modify or change undesirable behavior. This is a performance based feedback system that links leadership development to organizational core values, strategic objectives and successful leadership behavior.

The 360-degree feedback approach is to collect perceptions of a leaders behavior from themselves, their supervisors, their peers and their subordinates. The

perceptions can be tailored to the needs of the organization, but normally focus on organizational norms and values, leadership competencies and the influencing skills of the leader. Analysis of the gap between various perceptions provides information useful to support changing and/or developing important behavior.[5] Thus this process gives individuals timely useful information about the impact of their behavior, and allows them to practice desired behaviors. "In a period of rapid and often bewildering environmental shifts, it helps organizations identify crucial success factors and align their internal competencies with the challenges they face. 360-degree feedback can be a powerful tool for organizational change."[6]

The two primary purposes for 360-degree assessment are **evaluations** and **development**.[7] **Evaluative assessments** are usually used to provide input for performance appraisals, compensation decisions, succession planning and personnel assignments. **Developmental assessments** are conducted to identify areas of opportunity for individual improvement, and to facilitate development of action plans to improve in those areas. Authorities on 360-degree feedback maintain there are five essential points that make a 360-degree feedback program effective:

1. Link the effort to a strategic initiative or organizational need
2. Get senior management to participate in and drive the effort
3. Emphasize clear and frequent communications about the initiative's purpose and implications for each member of the organization
4. Ensure that people see the behaviors that will be measured as important and relevant to their jobs
5. Provide ongoing support and follow-up[8]

The initiative's purpose and implications for each member suggests that employees must understand the purpose of the 360-degree data collection and know the organization's non-threatening use of the data.

On going support and follow-up actions include the need to take meaningful steps to translate feedback into action. "Not all behaviors lend themselves to improvement by self-monitoring. If the successful use of a practice requires skills that the (officer) currently lacks, coaching (mentoring) may be necessary."[9] Each participant, then, should develop an individual improvement plan with realistic strategies to achieve them. "If participants do not take meaningful steps to translate their feedback into action within two weeks of leaving the work session, they will probably never do so."[10]

360-DEGREE SUCCESSES

360-degree feedback is used successfully in the corporate world, but has had only limited exposure in a military environment. However, peer and subordinate feedback has been advocated by a number of people for evaluation of military leaders.[11] Ernst and Young's Finance, Technology and Administrative Division found that periodic feedback on how leaders measure up against critical leadership characteristics enhance leadership. Superiors help each subordinate develop an individual training plan, and specific training is offered for each of the desired characteristics.[12] Weyerhaeuser Company centers its leadership development program on the use of individual employee development plans based upon 360-degree feedback on leadership competencies.[13] During the author's visit with Intel Corporation Human Resources Division, Intel explained that they also employ a 360-degree feedback program for individual manager development. This is a mandatory procedure for all except the most senior leadership at Intel. The results of each individual's analysis are used as the basis for further leadership training.

Disney World has spent years developing a unique corporate culture. Disney's CEO considers maintaining Disney's culture his number one priority. Among the tools

used at Disney are employee surveys and 360-degree feedback, to include a focus on leadership and culture. The feedback is used in management training, as well as mentoring, personal development plans and core training programs.[14]

The U.S. Army has begun work with this promising technique. It conducted very successful demonstrations of 360-degree feedback with two combat brigades at the National Training Center at Fort Irwin, California. Both brigade implementations involved officers between the ranks of 0-3 and 0-6, and utilized 360-degree feedback. A full 90% of the participants indicated a willingness to change behaviors as a result of feedback. In follow-up research, conducted 3 months after the initial feedback interventions, subordinates, peers and superiors reported a noticeable positive change in leadership behavior in almost 70% of the participants. The brigade implementations included subordinate feedback and were conducted in an environment where leadership was being applied to achieve military objectives. The Army's objective for 360-degree feedback is to develop a web-based tool tied to a web-based leadership development site with initial availability during fiscal year 2003. It is likely the Army will limit 360-degree feedback to use as a development instrument and not incorporate it into their evaluation or selection processes.[15]

As recently as in 1999 one Air War College research paper argued that the Air Force should use this approach to improve leadership development.[16] However to date, 360-degree feedback has not seen much utilization in the Air Force. The Center for Professional Development (CPD) at Air University's experimented with 360. Students scheduled for certain CPD courses received questionnaires to be filled out by their subordinates, peers, and bosses prior to their departure for school. Later, feedback sessions were conducted as part of the course curriculum. Although only a small percentage of officers were exposed to this technique, CPD's use of 360-degree feedback has since been discontinued.

AIR FORCE 360-DEGREE FEEDBACK

Clearly a key element of successful leadership development is performance feedback. The formal Air Force feedback process calls for downward directed feedback from supervisors. While 360-degree feedback is not right for every situation, thoughtful application would make it very helpful for leadership development.

360-degree feedback data provides the information necessary to arrive at a clear understanding of the leader's performance. This understanding is essential to effective learning and development.[17] It is generally considered to be most useful as a development tool in a non-threatening

environment. Therefore, it has more merit in the Air Force as a developmental tool than as an assessment tool. In addition, peer feedback for appraisal purposes could create a conflict of interest in our competitive environment. Because of this I would recommend 360-degree feedback as a leadership evaluation process, but I wouldn't recommend incorporating results into the Officer Evaluation System.

Air Force systems that could support implementation of a 360-degree feedback currently exist. Electronic surveys are now used for data collection by offices as diverse as from a local Social Actions office to the CSAF. Sophisticated, full-featured and user-friendly 360-degree software packages exist for gathering, processing and reporting employee feedbacks.[18] Social Action offices already employ similar techniques when completing unit climate assessments.

My recommendation is that the Air Force should employ a 360-degree feedback program at three points in an officer's career to support leadership development. The first time an individual serves as a flight commander, a 360-degree analysis should be completed to analyze their leadership approach, their support of Air Force core values, <u>and</u> their development of subordinates. This will be invaluable input fairly early in their career. Second, after one year in command, all squadron commanders should have their second

360-degree feedback conducted. This will again give them valuable information to make any necessary modifications to their leadership style, and will provide a basis of comparison of behavior with their first feedback. Finally, after one year as a group commander, a final assessment should be accomplished. This will give all officers destined for top leadership three clear pictures of how their peers and subordinates perceive their leadership, and would provide ample support for behavior modification.

BENEFITS OF 360-DEGREE FEEDBACK

Today there is no accurate way to monitor the progress of behavioral development. Under the current system the usefulness of individual feedback sessions varies greatly, to include rumors of non-existent feedback sessions that are "pencil-whipped" at a later date. A 360-degree feedback approach can provide a common model for effective Air Force leadership development.

Further, 360-degree feedback could help DAL achieve Air Force goals, because it can serve to measure both individual and organizational leadership development. Individual officers would improve their leadership skills based upon feedback, and aggregate data would provide a service-wide picture of leadership development on a behavioral basis. Analysis would allow the organization to clarify training

priorities and manage and apply resources more efficiently by focusing on higher priority areas. It would definitely provide Air Force leadership with insights they would not receive under the current feedback system.

360-degree feedback not only facilitates personal and professional growth, but also reinforces the importance of subordinates to the organization. Just requesting the perspective of subordinates can strengthen an organization and provide additional motivation to employees by increasing the sense of worth of the subordinate. 360-degree feedback will also increase personal awareness of organizational expectations by increasing accountability. The wording of questionnaires can even help reinforce organizational priorities for those who fill them out.

Finally, collective data analysis could provide an excellent measure of organizational climate and culture. "In organizations where continual learning is part of the corporate culture, the insights gained from 360-degree feedback become integrated into people's ongoing development."[19] But the strategic implementation of a 360-degree feedback program to support leadership development is only one piece of an overall program to enhance individual supervisors responsibility for subordinate development.

[1]. "American Military Culture in the Twenty-First Century", Center for Strategic and International Studies, Feb. 2000: 2.
[2]. Ibid: 5 and 7.
[3]. Coppola, Bob, "Coaching the Under-Performing Manager", *HR Magazine, Society for Human Resource Management*, Oct 1995: 1.
[4]. Thomas, Kenneth and Barrios-Choplin, Bob, *Effective Leadership in TPUs: Findings from Interviews at 16 Units*, Naval Postgraduate School, July 1996: 37.
[5]. Team Builders Plus, available at http://360-degreefeedback.com.
[6]. Lepsinger, Richard and Lucia, Antoinette D., *The Art and Science of 360-Degree Feedback*, San Francisco, Jossey-Bass Pfeiffer, 1997: 221.
[7]. "Multisource Feedback," National Computer Systems, available at http://www.ncs.com/ncscopr/research/97-8.htm.
[8]. Lepsinger, Richard and Lucia: 41-45.
[9]. Ibid: 186.
[10]. Ibid: 173.
[11]. Wilson, George, C., "Promoting the Best Military Commanders," *National Journal*, 4 Dec 1999: 3.
[12]. "Heirs Unapparent", HR Magazine, Society of Human Resource Management, February 1999: 2.
[13]. U.S. Government Accounting Office, *HUMAN CAPITAL, Key Principles From Nine Private Sector Organizations*, Report to Congressional Requesters, Jan 2000: 3 and 10-11.
[14]. Rubis, Leon, "Show", *HR Magazine, Society for Human Resources Management,* April 1998: 7.
[15]. Cuna, Lt Col Rui, USA, Army Leadership Research and Assessment, Interview conducted by Lt Commander Joe Beel, USN, Jan 2000.
[16]. Hancock, Lt Col Thomas, *360-degree Feedback: Key to Translating Air Force Core Values Into Behavioral Change*, Air War College research paper, July 1999.
[17]. Coppola: 2.
[18]. "360-degree Feedback Vendor Shootout: Questions to Ask About 360 Degree Feedback Programs." *HR Magazine, Society for Human Resources Management*, Dec 1998: 1.
[19]. Lepsinger, Richard and Lucia: 195.

Leadership Development Recommendations

My recommendations are that the Air Force should significantly strengthen the supervisor's role in subordinate/leadership development by holding supervisors accountable for the most important leadership task after the mission; that subordinate development should be organized along the specific competencies articulated by DAL; and, that 360-degree feedback should be utilized as a tool at specific points in an officer's career to enhance leadership development.

More specific suggestions are listed below, along with supporting principles from Kram for those suggestions that relate to mentoring:

1. Rewrite top-level Air Force educational doctrine to clearly state the necessity for supervisors to be responsible for the development of their subordinates. (This supports Kram's concept that the culture of an organization, its values, rules, behavior or leaders, etc. define the value of mentoring for the organization.)
2. Define officer Professional Military Education in Air Force doctrine to mean life-long learning that is required of a professional, with a strong emphasis on the learning that occurs between traditional PME courses. (This supports

Kram's concept that the culture of an organization, its values, rules, behavior or leaders, etc. define the value of mentoring for the organization.)

3. Continue with the plans to make mentoring mandatory for all officers, thus providing the senior leadership example that is missing today. (This supports Kram's concept that mentoring has benefits at all levels.)

4. Rewrite the Air Force mentoring AFI to bring the program into compliance with the rigors of our educational doctrine, as is required of all educational programs. (This supports Kram's strategy that education can change culture.)

5. Require each MAJCOM to implement a mentoring program that fulfills the complete objectives of the Air Force program. Use AETC's Mentoring program as a starting point. (This supports Kram's strategy that task design can change behavior.)

6. Create a simple individual development plan that includes as a minimum the DAL competencies earned in the subordinates current position, the DAL competencies earned at the next higher level in organization, the list of required reading for the current year of the subordinate, and an area for any quarterly hot or special topics. The competency of subordinate development itself should be mandatory for every officer's development plan. Make use of the plan format mandatory for all supervisors. (This

supports Kram's strategy that task design can change behavior.)

7. Develop basic and advanced lesson plans for teaching the responsibilities and methodologies of mentoring and leadership development to both supervisors and subordinates. (This supports Kram's strategy that education can change the culture.)

8. Make the basic lesson plan a permanent part of the Aerospace Basic Course so every officer entering the Air Force fully understands both their responsibility as a supervisor, and the responsibility their supervisor has to guide their development. Over time this idea will permeate the officer corps. (This supports Kram's strategy that junior individual's education should focus on the benefits of mentoring.)

9. Require every MAJCOM's pre-command training course for squadron commanders to teach the advanced/mentoring skills lesson plan. (This supports Kram's strategy that mentoring skill training is essential.)

10. Incorporate the advanced/mentoring skills lesson plan into every pre-group commander's training course taught at Air University. In order for this approach to become ingrained in Air Force culture, leaders must teach their subordinate how to develop their own subordinates. This point may seem self evident, but it is my experience that

very little of an Air Force officer's time is spent teaching subordinates how to develop people. (This supports Kram's strategy that mentoring skill training is essential.)

11. Redesign current feedback forms to ensure time is spent in all feedback sessions reviewing the progress that subordinates have made developing their subordinates. (This supports Kram's characteristic that performance management systems can encourage the use of mentoring.)

12. Change Officer Performance Report formats to include a box for rating officers in subordinate development. (This supports Kram's strategy of performance management systems encouraging mentoring.)

13. Establish annual minimum, mandatory self-study objectives for each year of an officer's first twenty years in the Air Force. These should include such items as doctrine, strategy, AF Heritage and military history that go beyond a normal reading program. These objectives should be intertwined into a continuum of life-long learning, and timed to support in-residence curriculums. Officers should prepare for ACSC between SOS and ACSC, and for AWC between ACSC and AWC.

14. Make the AF reading program mandatory for all officers, and divide it into annual increments to support the previous suggestion. Feedback sessions should ensure officers are current in their professional studies.

15. Designate one office at Air University as the POC for the mandatory life-long officer education continuum. These duties would be to ensure all educational objectives, to include mentoring objectives, are in concert with DAL.

16. Add a mandatory read file section for supervisors to the AFPC mentoring web page for special subjects and hot topics, and include these subjects into individual development plans. The life-long learning office from the previous suggestion could supply the required materials.

17. Incorporate a limited 360-degree feedback system. Assign this function to one office on each base, such as the Social Actions office. Make feedback sessions a firm requirement three times in an officer's careers—at flight command, at squadron command, and again at group command.

18. Create an Air Force tradition where at the end of each supervisor's tour of duty, during the final interview with their boss, they turn in their subordinates individual development plans. This will help ensure continuity of the plan, will give the boss another update on subordinate development, and would facilitate emphasizing subordinate development in the first meeting with the replacement. This will institutionalize the practice of planning and discussing leadership development at the arrival and departure of every officer.

19. Hold organizations and individual supervisors accountable for subordinate development by making it a high value item on all inspector general visits. If leadership development is truly the most important goal of leadership after the mission, then every squadron and wings IG rating must directly reflect that priority. A lower rating during an IG visit would be an indirect impact that held leaders that don't comply with Air Force objectives for subordinate development accountable. (This supports Kram's strategy of utilizing the reward system.)

20. Don't give this idea a fancy name or even refer to it as a new program. Just do it.

Conclusion

The Air Force must finally begin to hold supervisors accountable for the personal, professional, and leadership development of their subordinates. "If a leader is spending a great deal of time teaching, and only a modest amount of time problem solving, the leader probably has the priorities straight."[1]

The DAL program offers the perfect opportunity to create a cultural change. However, the Air Force's laudable efforts to redesign its entire approach to leadership development will not realize its fullest capabilities unless individual supervisory responsibilities are strengthened in conjunction with the planned changes.

Significant changes to Air Force educational doctrine, the application of that doctrine to the Air Force Mentoring Program, and the way we approach, evaluate, and improve subordinate development must take place before it will become part of our culture.

"Fortunately, the development of leaders is possible on a scale far beyond anything we have ever attempted."[2]

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[1]. Smith: 155.
[2]. Gardner: xix.

BIBLIOGRAPHY

Air Education and Training Command Instruction (AETCI) 36-101, Guide to the AETC Mentoring Program, dated 22 April 1996.

Air Force Doctrine Document (AFDD) 2-4.3, Air Force Education and Training, dated 9 September 1998.

Air Force Policy Directive (AFPD) 36-34, Air Force Mentoring Program, dated 1 November 1996.

Air Force Instruction 36-3401, Air Force Mentoring, dated 1 July 1997.

Air Force Instruction 36-3401, Air Force Mentoring, dated September 1999 (Draft).

"American Military Culture in the Twenty-First Century", Center for Strategic and International Studies, dated February 2000.

Amparan, Colonel Cecil J., "Universal Mentoring: Expanding Opportunity Across the Officer Ranks", *Marine Corps Gazette*, Volume 80, Number 1, January 1996.

Beel, Lieutenant Commander Joseph J., US Navy, "360-Degree Feedback: A Leadership Development Tool", US Navy Research Paper, April 2000 (Draft).

Bennis, Warren, *On Becoming a Leader*, Addison-Wesley Publishing Company, Reading, MA, 1989.

Berlin, Robert H., "Mentoring Like Ike", *Military Review*, Volume LXX, October 1990, No. 10, pp 26-30.

Boles, General Billy, quoted in U.S. Air Force Online News Release, 15 September 1999.

Coppola, Bob, "Coaching the Under-Performing Manager", *HR Magazine*, *Society for Human Resource Management*, October 1995.

Covey, Stephen, *The Seven Habits of Highly Effective People*, Books-on-Tape.

Crackel, Theodore J., "On the making of lieutenants and colonels", *The Public Interest*, No.76, Summer 1984, pp 18-30.

Creech, General W. L., quoted in "Should the Air Force Establish a Formalized Mentoring System", AWC Research Report by Lt Col Albert E. Lassiter and Lt Col Danny C. Rehm.

Cuna, Lt Col Rui, USA, Army Leadership Research and Assessment, Interview conducted by Lt Commander Joe Beel, USN, Jan 2000.

Drew, Dennis Colonel, "Educating Air Force Officers: Observations after 20 Years at Air University", *Airpower Journal*, Volume XI, No. 2, Summer 1997, pp 39-44.

Falletta, Salvatore Ed.D., Intel Corp Assessment Manager, Interviewed by the author on 7 March 2000.

Flanagen, General E.M Jr., "Mentoring—Taking Time to Communicate", *Army*, Vol. 42, No. 9, September 1992.

Fogleman, General Ronald R., "The Importance of Mentoring", transcript of remarks to the Air Force Cadet Officer Mentoring Action Program Annual Banquet, Bolling AFB, DC, 21 Oct 1995.

Fogleman, General Ronald R., "The Profession of Arms", *Airpower Journal*, Vol. 9, Fall 1995, pp 4-5.

Forsythe, George B., "The Preparation of Strategic Leaders", *Parameters*, Spring 1992, pp 38-49.

Fried, N. Elizabeth, "360-degree Feedback Vendor Shootout: Questions to Ask About 360 Degree Feedback Programs." *HR Magazine*, Society for Human Resources Management, Dec 1998.

Fuller, General J.F.C, *Grant and Lee: A Study in Personality and Generalship*, Indiana University Press, Bloomington, IN, 1957.

Galbraith, Michael W., and Cohen, Norman H., *Mentoring: New Strategies and Challenges*, Jossey-Bass Publishers, San Francisco, CA, Summer 1995.

Gardner, John W., *On Leadership*, The Free Press, New York, NY, 1990.

Gfrerer, James P. Capt, "Where Have All the Mentors Gone? Mentoring: The Lost Part of Leadership", *Marine Corps Gazette,* Volume 80, Number 1, January 1996.

Grassey, Lieutenant Commander Thomas B., US Naval Reserve, "Professional Development", *U.S. Naval Institute Proceedings*, August 1977, No. 103, pp 31-39.

Hancock, Lt Col Thomas, "360-degree Feedback: Key to Translating Air Force Core Values Into Behavioral Change", Air War College research paper, July 1999.

"Heirs Unapparent", *HR Magazine*, Society of Human Resource Management, February 1999.

Holder, Leonard D. Jr., and Williamson, Murray, "Prospects for Military Education", *Joint Forces Quarterly*, Spring 1998, pp 81-90.

Kelley, Lt Gen Jay W., "Brilliant Warrior", A Research Paper Presented to Air Force 2025, August 1996.

Kingseed, Lt Col Cole C., "Mentoring Like Ike", *Military Review*, Volume LXX, No. 10, Oct 1990.

Kram, Kathy E., *Mentoring at Work: Developmental Relationships in Organizational Life*, University Press of America, Lanham, MD, 1988.

Leboeuf, Colonel Maureen K., US Army, "Developing a Leadership Philosophy", *Military Review*, May-June 1999.

Lepsinger, Richard and Lucia, Antoinette D., *The Art and Science of 360-Degree Feedback*, San Francisco, Jossey-Bass Pfeiffer, 1997.

Link, Maj Gen Chuck, DAL Executive Steering Committee Update Briefing, 7 Jan 2000.

Lugo, Capt Frank E. Jr., "Marine Leaders: Masters of Many Roles", *Marine Corps Gazette*, Volume 82, Number 4, April 1998.

Marine Corps Regulatory Pamphlet, 6-11E, Mentoring, dated 13 Oct 99.

"Multisource Feedback," National Computer Systems, http://www.ncs.com/ncscopr/research/97-8.html

Rapp, Ed, "The Values of Mentoring", *The Military Engineer*, Oct-Nov 1998, Volume 90, No. 594, pp 60-61.

Rubis, Leon, "Show", *HR Magazine, Society for Human Resource Management*, April 1998.

Shachnow, Major General Sidney, U.S. Army (Ret), "Mentoring: Critical Assistance for the SOF Community", *Special Warfare*, Volume 12, No. 2, Spring 1999, pp 36-39.

Shea, Gordon, *Mentoring: Helping Employees Reach Their Fullest Potential*, Menlo Park, CA, Crisp, 1992.

Shea, Gordon, *Mentoring: How to Develop Successful Mentor Behaviors*, Menlo Park, CA, Crisp, 1992.

Smith, Major General Perry M., *Taking Charge: Making the Right Choices*, Avery Publishing Group Inc, Garden City Park, New York, 1993.

Team Builders Plus, http://www.360-degreefeedback.com

Thomas, Kenneth and Barrios-Choplin, Bob, *Effective Leadership in TPUs: Findings from Interviews at 16 Units*, Naval Postgraduate School, July 1996.

Timmons, Colonel Timothy T., *Commanding an Air Force Squadron*, Air University Press, Maxwell AFB AL, December 1993.

U.S. Government Accounting Office, *HUMAN CAPITAL, Key Principles From Nine Private Sector Organizations*, Report to Congressional Requesters, Jan 2000.

Wilson, George, C., "Promoting the Best Military Commanders," *National Journal*, 4 Dec 1999.

Zeh, Michael, "A Mentor for All Reasons", *Personnel Journal*, Jan 1988.