

Technical Report 532

AD A115890

SENIOR LEADERSHIP: AN ANNOTATED BIBLIOGRAPHY OF THE MILITARY AND NONMILITARY LITERATURE

Melvin J. Kimmel

LEADERSHIP AND MANAGEMENT TECHNICAL AREA

DTIC FILE COPY



U. S. Army

Research Institute for the Behavioral and Social Sciences

June 1981

Approved for public release, distribution unlimited.

DTIC
ELECTE
JUN 22 1982
S D F

U. S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES

A Field Operating Agency under the Jurisdiction of the
Deputy Chief of Staff for Personnel

JOSEPH ZEIDNER
Technical Director

L. NEALE COSBY
Colonel, IN
Commander

NOTICES

DISTRIBUTION: Primary distribution of this report has been made by ARI. Please address correspondence concerning distribution of reports to: U.S. Army Research Institute for the Behavioral and Social Sciences, ATTN: PERI-TST, 5001 Eisenhower Avenue, Alexandria, Virginia 22333.

FINAL DISPOSITION: This report may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM												
1. REPORT NUMBER Technical Report 532	2. GOVT ACCESSION NO. AD-A115 890	3. RECIPIENT'S CATALOG NUMBER												
4. TITLE (and Subtitle) SENIOR LEADERSHIP: AN ANNOTATED BIBLIOGRAPHY OF THE MILITARY AND NONMILITARY LITERATURE	5. TYPE OF REPORT & PERIOD COVERED Technical Report													
	6. PERFORMING ORG. REPORT NUMBER --													
7. AUTHOR(s) Melvin J. Kimmel	8. CONTRACT OR GRANT NUMBER(s) --													
9. PERFORMING ORGANIZATION NAME AND ADDRESS U.S. Army Research Institute for the Behavioral and Social Sciences 5001 Eisenhower Avenue, Alexandria, VA 22333	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS 2Q263731A792													
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Deputy Chief of Staff for Personnel Washington, DC 20310	12. REPORT DATE June 1981													
	13. NUMBER OF PAGES 58													
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) --	15. SECURITY CLASS. (of this report) Unclassified													
	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE --													
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.														
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) --														
18. SUPPLEMENTARY NOTES --														
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) <table border="0"> <tr> <td>Senior leadership</td> <td>Leadership skills</td> <td>Leadership</td> </tr> <tr> <td>Colonels</td> <td>Leadership functions</td> <td>Management</td> </tr> <tr> <td>General officers</td> <td>Management skills</td> <td></td> </tr> <tr> <td>Executives</td> <td>Management functions</td> <td></td> </tr> </table>			Senior leadership	Leadership skills	Leadership	Colonels	Leadership functions	Management	General officers	Management skills		Executives	Management functions	
Senior leadership	Leadership skills	Leadership												
Colonels	Leadership functions	Management												
General officers	Management skills													
Executives	Management functions													
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A literature search was performed to determine the state-of-the-art of research and theory on senior leadership skills, functions, activities, and other job related characteristics. One hundred thirty-five military and non-military contributions were annotated and organized into three sections: Summary literature, Empirical literature, and Nonempirical literature. Within each section the contents of each reference were classified as to (1) "Organization Type" (military, nonmilitary, or military-nonmilitary comparison), (Continued)														

DD FORM 1473

EDITION OF 1 NOV 65 IS OBSOLETE

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

Item 20 (Continued)

(2) *Target Population* (senior leaders only or level comparison literature), and (3) *Subject Matter* (focus on senior leader competencies--i.e., personal qualities, skills, abilities, etc.--and/or job-related variables).



Accession For	
NTIS GRA&I	☒
DTIC TAB	☐
Unannounced	☐
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A	

Unclassified

ii

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

Technical Report 532

SENIOR LEADERSHIP: AN ANNOTATED BIBLIOGRAPHY OF THE MILITARY AND NONMILITARY LITERATURE

Melvin J. Kimmel

Submitted by:
T. Owen Jacobs, Chief
LEADERSHIP AND MANAGEMENT TECHNICAL AREA

Approved by:

Cecil D. Johnson, Director
MANPOWER AND PERSONNEL
RESEARCH LABORATORY

U.S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES
5001 Eisenhower Avenue, Alexandria, Virginia 22333

Office, Deputy Chief of Staff for Personnel
Department of the Army

June 1981

Army Project Number
2Q263731A792

Leader Development

Approved for public release; distribution unlimited.

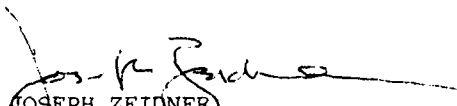
ARI Research Reports and Technical Reports are intended for sponsors of R&D tasks and for other research and military agencies. Any findings ready for implementation at the time of publication are presented in the last part of the Brief. Upon completion of a major phase of the task, formal recommendations for official action normally are conveyed to appropriate military agencies by briefing or Disposition Form.

FOREWORD

The Leader Development Team of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) is involved in research and development to improve the effectiveness of Army leadership. Its current focus is the identification of required skills and functions at all command levels and the subsequent development of assessment and training programs.

This Technical Report provides an annotated bibliography of the senior leadership literature with an emphasis on necessary skills and functions. It includes theoretical and empirical contributions from military as well as nonmilitary sources and organizes the literature according to content area and nature of the publication.

The research effort is responsive to the requirements of RDT&E Project 2Q26371A792, Leadership and Management Technical Area of the FY 81 ARI work program.


JOSEPH ZEIDNER
Technical Director

SENIOR LEADERSHIP: AN ANNOTATED BIBLIOGRAPHY OF THE MILITARY AND NONMILITARY LITERATURE

BRIEF

Requirement:

To compile and organize the existing literature on senior leadership skills and functions.

Procedure:

Literature on senior leadership was compiled through library searches and consultations with leadership/management experts from academia, industry and the military. Published and unpublished manuscripts were reviewed for their relevance to the required functions and competencies of effective senior leaders at the colonel and general offices level. The most relevant contributions were abstracted and organized into three sections: Summary Literature (i.e. manuscripts providing a general overview of the field); Empirical Literature (i.e. research-based contributions); and Nonempirical Literature (i.e. a representative sample of theories and personal opinion essays). Within the sections each reference was classified according to its content area on three dimensions: "Organization Type" (military, nonmilitary or military-nonmilitary comparisons); "Target Population" (senior leaders or level-comparisons); and "Subject Matter" (senior leader competencies and/or job related variables).

Findings:

(1) Of the 135 contributions abstracted, 28 items summarized the existing literature, 64 were research-based, and 43 were theoretical or personal opinion essays.

(2) Twenty-five items focused on military leadership, 98 dealt with the industrial/private sector and 12 involved comparisons between the two.

(3) One hundred twenty four items dealt specifically with senior leadership. The remaining 11 dealt with general theoretical issues.

(4) Of the 124 senior leadership contributions, 77 discussed only senior leaders and 47 compared senior leaders with lower-level management.

(5) Fifty-six senior leadership items focused on senior leader competencies, 30 concerned themselves mainly with the senior leader's job and 38 dealt with both competencies and job related variables.

(6) Of the 11 general-issue items, six discussed the relationship between leadership and management, while five described similarities and differences between military and nonmilitary environments.

Utilization of Findings:

This bibliography will be of immediate value to researchers, instructors and military leaders concerned with leadership training and development requirements at senior levels. In addition, it will form one basis for research and development in this area.

SENIOR LEADERSHIP: AN ANNOTATED BIBLIOGRAPHY OF THE
MILITARY AND NONMILITARY LITERATURE

CONTENTS

	Page
INTRODUCTION.....	1
SUMMARY LITERATURE.....	5
EMPIRICAL LITERATURE.....	18
NONEMPIRICAL LITERATURE.....	43

LIST OF TABLES

Table 1.	Descriptive Contents of Summary Literature.....	8
2.	Descriptive Contents of Empirical Literature.....	20
3.	Descriptive Contents of Nonempirical Literature.....	46

INTRODUCTION

Organizations need competent leaders at all command levels to efficiently and effectively accomplish their missions. Recognizing this, the Army has done a great deal of its own research and borrowed extensively from the non-military sector to learn about the necessary skills, personal qualities, abilities, and knowledge requirements of competent leaders. The bulk of this literature concentrates on leadership at the lower command levels, while research on senior leaders (colonels and general officers) has been largely ignored. Since tasks, responsibilities, and functions differ according to rank, it may be that the necessary competencies differ as well, and this literature may not be totally applicable to leaders at the colonel and general officer level. A requirement therefore exists for a research program that focuses specifically on the necessary senior leadership competencies to determine how relevant the current literature is to these higher level positions. This type of research program seems especially important since these senior leaders have the broadest impact on the Army's overall effectiveness.

The Army Research Institute has initiated a program to meet this need. Before formulating researchable hypotheses and carrying out a comprehensive research program, it was necessary to first discover what already had been done in the area to avoid "re-inventing the wheel." Literature searches were undertaken at a number of libraries including the Library of Congress, several college and university libraries, and the U.S. Department of the Army Library, Headquarters; leadership experts from academia, industry, and the military were consulted; and hundreds of books, popular magazines, journal articles, technical reports, and unpublished manuscripts were reviewed.

This annotated bibliography is a product of these efforts. It contains 135 items from both the military and nonmilitary sectors on senior leadership

functions and the knowledge, skills, and personal qualities needed to effectively perform these functions. The majority of the listings are research-based. However, a number of theoretical works, personal opinion essays, and other nonempirical contributions have also been included to serve as possible sources of researchable hypotheses.

The bibliography does not claim to include all the relevant literature on the subject. For example, much of the training and development literature has not been annotated because recent bibliographies already exist in the area.¹ Also, the great bulk of the leadership, management, and organizational literature is omitted because much of it either does not distinguish among managerial levels or focuses only on lower management levels. To learn about these possible level differences, items have been included that compare hierarchical levels, however.

The bibliography is especially selective regarding the nonempirical literature. Literally hundreds of "cookbooks" have been published expressing one person's opinion of what it takes to be an effective executive. Because they are not based on empirical evidence, and, for the most part, differ very little from each other, only a representative sample of these items has been included.

The annotated items are divided into three broad sections according to the general nature of the publication. Section 1 contains materials summarizing the existing literature and provides a general overview of the field. Section 2 compiles the research-based literature. Most of the items

¹For an excellent annotated bibliography on military training and development, see Taylor, R. L. LTC & Wall, D. W. CPT. Air Force Professional Military Education and Executive Leadership and Management Development. A Summary and Annotated Bibliography. USAF Academy, COLO: Dept. of Economics, Geography and Management, January 1980. The nonmilitary literature is adequately covered in Margerison, C. J. & Huter, N. Management and Organization Development Bibliography. West Yorkshire, England: MCB Publications, 1975.

in this section report original research, while some describe earlier research programs. Section 3 includes the nonempirical contributions. These are largely conceptual pieces based on personal experiences rather than systematic research efforts.

References are arranged alphabetically within each section, and assigned a hyphenated, three-digit classification number (e.g., "1-01"). The first digit identifies the section in which the listing appears (1 = Summary Literature; 2 = Empirical Literature; 3 = Nonempirical Literature). The two numbers following the hyphen refer to the item's location within that section. Thus "1-01" would refer to the first item in the Summary Literature Section; "2-10" to the tenth listing in the Empirical Literature Section, etc.

A brief introduction precedes each section, summarizing its content. Each introduction includes a table which classifies the section items on three dimensions: "Organization Type," "Target Population," and "Subject Matter." With respect to "Organization Type," most items can be classified as being concerned with either the military or the nonmilitary sector. However, some of the literature deals with comparisons between the two sectors. These are classified under the subdivision "Mil-Nonmil Comparison." Two classifications exist for "Target Population." The subdivision "Senior Leaders" contains items dealing with the characteristics of top management only, while the literature under the "Level Comparison" subdivision contrasts senior leaders with lower level management. The third dimension, "Subject Matter," describes the item's content. Some items concern skills, abilities, personal qualities, and/or knowledge requirements of senior leaders. These are classified under the "Competencies" subdivision. Other items are concerned with the nature of the positions senior leaders hold, rather than with specific competencies needed for those positions. Included here are

items discussing functions, roles, job-related activities, position descriptions, and other variables more characteristic of the organization than the individual. Items in this category are classified under the "Job-Related Variables" subdivision. Items concerned with both competencies and job-related variables are listed under each of the two subdivisions.

The items are listed in the tables according to the last two digits of their identification number. The first digit, which identifies the section, has been omitted since all items in a particular table are contained within the same section.

Although the bibliography is not exhaustive, we have attempted to include as many of the truly significant items as could be found, read, and evaluated. Given the unstructured state of the literature (and the present author's personal biases), it would not be surprising to learn that some significant contributions have been unintentionally omitted. Should the reader note such omissions, a phone call or a letter would be sincerely appreciated.

SECTION 1: SUMMARY LITERATURE

The 28 items in Section 1 provide a general overview of the field inasmuch as they either summarize the existing literature or raise general issues that are relevant to senior leadership competency. Sixteen of the listings review the empirical and theoretical literature; two are edited volumes (one of these (10) is a compilation of nonempirical essays and the other (27) contains research literature); and 11 deal with general theoretical issues relevant to but not specifically concerned with the study of necessary senior leadership competencies and functions.²

Table 1 describes the content of these 28 listings according to the classification system outlined earlier. The majority of these listings deal specifically with senior leadership competencies from the nonmilitary sector. Of the military contributions, one (14) reviews the general officer literature, two (05, 24) summarize the competency literature from both military and nonmilitary sectors, and one (03) reviews studies related to the transferability of skill requirements from military to nonmilitary sectors.

The general-issues items are listed only under "Organization Type" in Table 1 since they do not specifically deal with senior leadership competencies. Six of the general-issues listings (03, 09, 11, 15, 19, 21) concern the question of generalizability between military and nonmilitary sectors. The military has repeatedly borrowed from the private sector to develop its management and training philosophy. This implies acceptance of the assumption that the two sectors are sufficiently similar to warrant the direct transfer of management techniques, theories, and research findings. The six items discuss the validity of this assumption. The remaining five general-issues items (08, 17, 23, 26, 28) discuss the similarities, differences,

²One of the listings (03) is both a literature review and a general-issues item. Hence the three types of listings discussed in this paragraph adds to 29 rather than 28 (the actual number of section listings).

and relative importance of the two major components of senior level positions: "Leadership" and "Management." Three of these items (08, 17, 23) specifically refer to leadership versus management in the military and hence are classified under the "Military" subdivision in Table 1. The remaining two leadership/management items (26, 28) do not specifically mention the military and are classified in the "Nonmilitary" subdivision.

Table 1

Descriptive Contents of Summary Literature (Section 1)

Organization Type			Target Group		Subject Matter	
Military	Non-military	Mil-Nonmil Comparison	Senior Leaders	Level Comparisons	Competencies	Job-Related Variables
05	01	03	01	04	01	01
08	02	09	02	05	02	04
14	04	11	06	12	04	06
17	06	15	07	13	05	10
23	07	19	10	20	07	12
24	10	21	14	22	10	16
	12		16	25	12	18
	13		18		13	22
	16		24		14	24
	18		27		18	27
	20				20	
	22				24	
	25				25	
	26				27	
	27					
	28					

- 1-01. Argyris, C. Research trends in executive behavior. Advanced Management, 1956, 21(3), 6-9. (Also in P. D. Grub & N. M. Loeser (eds.). Executive Leadership: The Art of Successfully Managing Resources. Wayne, PA: MOI Publications, 1969, pp. 429-434.)

Much of this article is a summary of Argyris' earlier writings on the need for executive training in human relations skills and participative management. The author's basic tenet is that executives must recognize the importance of building an organizational climate enhancing personal growth and development. Such a climate is fostered by free and open communication and sensitivity to own and others' feelings. This "humanistic" philosophy rests on the assumption that the creation of a trusting atmosphere will decrease employee apathy and increase individual satisfaction, group morale, the motivation to produce and, ultimately, productivity itself.

- 1-02. Bahn, C. Can intelligence tests predict executive performance? Personnel, 1979, 56(4), 52-59.

After summarizing research on the predictive power of intelligence tests at the executive level, Bahn concludes that a fairly high level of intelligence is needed to perform the executive functions but the exact level depends upon situational factors such as subordinate intelligence and the degree to which the job requires abstract thinking. He suggests the use of intelligence tests as one of several indicants of competence in executive selection and assessment.

- 1-03. Biderman, A. D. Where do they go from here--retired military in America. Annals of the American Academy of Political and Social Sciences, 1973, 406, 141-161.

After reviewing earlier studies on jobs taken by retired Army officers (of all ranks), the author concludes that skills learned in the military are transferrable to the industrial community. A 1966 study of 20,000 retired officers (mostly MAJs and LTCs) reported that 20% held managerial positions in industry, while an earlier survey found that almost one-half of the officers sampled accepted jobs in industry.

- 1-04. Campbell, J. P., Dunnette, M. D., Lawler, E. E., III, & Weick, E. K., Jr. Managerial Behavior, Performance and Effectiveness. New York: McGraw-Hill, 1970.

This often cited book provides a comprehensive summary and critique of the managerial effectiveness literature prior to 1970. The following chapters are especially relevant to managerial skills and characteristics: Chapter 2 (Determiners of Managerial Effectiveness), Chapter 4 (Describing the Managerial Job), Chapter 5 (Defining and Measuring Managerial Effectiveness), Chapter 6 (Possible Predictors of Managerial Effectiveness), Chapter 8 (Research Results: Actuarial Studies of Managerial Effectiveness), Chapter 9 (Research Results: Clinical Studies of Managerial Effectiveness), Chapter 15 (Managerial Motivation), and Chapter 17 (Managerial Style: Research Results and a Social Psychological View). A major theme of this volume is that managerial effectiveness is a function

of complex interactions between abilities, motivation, and the social and organizational environment. It rejects the static model used by most researchers of studying persons, jobs, and/or their interaction at one point in time, arguing that one must recognize "change" as an important characteristic of organizational life. While top managers are not the prime focus, they were represented in many of the studies cited involving level comparisons.

- 1-05. Clement, S. D. & Ayres, D. B. A Matrix of Organizational Leadership Dimensions. Leadership Monograph Series No. 8. Ft. Benjamin Harrison, IN: U.S. Army Administration Center, 1976.

This is a monograph in the U.S. Army War College "Leadership for the 1970s" series (see also 2-40, 2-57). It describes a taxonomy of nine management and leadership dimensions and the specific behaviors associated with each, according to rank level (lieutenant through general officer). This taxonomy was developed from an analysis of the leadership and management literature, with special emphasis on the behavioral studies in the Ohio State/University of Michigan tradition. The resulting nine dimensions are Communication, Human Relations, Counseling, Supervision, Technical, Management Science, Decision Making, Planning, and Ethics. In describing these dimensions by rank level, the author suggests there is less of a need for technical and leadership skills (i.e., human relations, Counseling, Supervision) and an increasing need for ethics (creating codes of behavior) and conceptual skills (Decision Making, Planning) as one ascends the organizational hierarchy. Communication skills remain extremely important at all levels, while the Management Science (i.e., administrative) skills are considered less important for colonel/general officers than for mid-level positions.

- 1-06. Cooper, C. C. & Marshall, J. Occupational sources of stress. Journal of Occupational Psychology, 1976, 49, 11-28.

After reviewing the literature on sources of occupational stress, the authors conclude that stress and stress-related illness increase at higher management levels because the situational factors associated with stress are more prevalent at these higher levels. Among these sources of stress are information overload, role conflict, role ambiguity, and overpromotion (i.e., being promoted to levels beyond their capabilities).

- 1-07. Dunnette, M. D. Predictors of executive success. In F. R. Wickert & D. E. McFarland (eds.), Measuring Executive Effectiveness. New York: Appleton-Century-Crofts, 1967, pp. 7-48.

A review of 40 studies done between 1950 and 1965 on traits, interests, biographical, and demographic data associated with executive success. Among the personality factors normally found were: dominance, self-confidence, conscientiousness, manipulative sociability (i.e., a desire to make business contacts as opposed to forming close personal ties), and high needs for independence, power, autonomy, achievement, and money. Biographic characteristics included an open, nonrestrictive upbringing, a background of

success, and college participation in extracurricular activities. In addition, some studies report executives scored high on "management" and low on "agriculture" and "medical professions" on vocational inventory batteries. The reviewer concludes from these studies that the executive's job is more task- than people-oriented and personal characteristics as well as training and experience are important for success.

- 1-08. Foote, E. P., COL. Drucker, Clausewitz and Us. Military Review, 1980, 60(7), 51-54.

Essay by a senior Army officer on the relative importance of leadership and management skills for commanding officers. The term "manager" has taken on a derogatory connotation, she notes, as the Army has begun to emphasize leadership training. The author argues against taking sides on the question of which is more important. Both roles are required of a commander, for he/she must influence, motivate, and direct people ("leadership") as well as organize nonhuman resources ("management"), and the commander should receive training in both.

- 1-09. Fottler, M. D. Is management generic? Academy of Management Journal, 1981, 6(1), 1-12.

The author argues that managerial functions are different for the four basic types of organizations (private for-profit, private nonprofit, private quasi-public, and public) in that each organization type is supported by different subsectors of society and has different demands placed on it. This, in turn, creates different values, incentives, and constraints for management and, hence, differences in how the basic managerial processes are implemented. The author concludes one should not generalize from one organization type to another.

- 1-10. Grub, P. D. & Loeser, N. M. (Eds.). Executive Leadership: The Art of Successfully Managing Resources. Wayne, PA: MDI Publications, 1969.

This book of readings is a compilation of 110 journal articles organized into 15 chapters covering a broad range of executive-related issues. Most articles can be classified as "think-pieces," based largely on the personal experiences of its authors with no original data presented and relatively few empirical studies cited. The major criteria for including an article in this volume, according to the editors, were recency of publication and relevancy to the modern executive rather than recognized quality. Articles most relevant to the topic of executive skills and functions are found in Chapter 2 ("The Role of the Executive"), Chapter 3 ("Criteria for Executive Success"), Chapter 4 ("Planning and Controlling: The Key to Dynamic Growth"), Chapter 6 ("Top-Level Decision and Communication"), Chapter 7 ("Identifying and Selecting Executives"), and Chapter 8 ("Motivation, Performance, and Appraisal"). (Some items from this book are annotated separately. See 1-01, 2-27, 3-15, 3-16, 3-29.)

- 1-11. Janowitz, M. Sociology and the Military Establishment. New York: Russell Sage Foundation, 1959.

In the first chapter of this old but not outdated book, Janowitz presents a case for the similarities between the military and industrial sectors. He acknowledges the obvious differences in goals (combat readiness vs. profit), motivational basis (duty and honor vs. free enterprise and profit-motive), ideal managerial characteristics (leader vs. manager), and the emphasis placed on authority and rank structure. However, he contends that these differences will lessen as the military becomes more "civilianized," by (1) working more closely with industry on technology, (2) shifting from a "hostility" to a "deterrence" philosophy, (3) becoming more concerned with a broad-range political social and economic issues, and (4) developing a less fluctuating and more stable peacetime force.

- 1-12. Kerr, S., Schriesheim, C. A., Murphy, C. J., & Stogdill, R. H. Toward a contingency theory of leadership based upon the consideration and initiating structure literature. Organizational Behavior and Human Performance, 1974, 12, 62-82.

The authors discuss job level as a possible moderator variable in their literature review of factors affecting the leader behavior dimensions of "Consideration" and "Initiating Structure." After considering the contradictory findings of 15 studies, they conclude there is no clear consensus concerning the nature of its moderating effect. They suggest that future research should control for other organizational variables which may be related to job level.

- 1-13. Korman, A. K. The prediction of managerial performance: A review. Personnel Psychology, 1968, 21, 295-322.

After reviewing the relevant literature prior to 1968, Korman evaluates the predictive validity of various assessment techniques. He concludes there are few valid performance predictors, especially for top level positions. Rating techniques, especially peer ratings, were found to be most predictive, and personality inventories and leadership ability tests were least predictive at all levels. Personal history forms and ability tests did not predict performance above the first-line supervisor level. Korman suggests that assessment techniques should be conceptually related to functions and skills of a particular position. One should first discover what the job entails, then develop predictors to assess the necessary functions and skills, rather than using the traditional "shotgun" empirical approach.

- 1-14. Malone, D. M., COL. Leadership at General Officer Level. Unpublished manuscript. U.S. Army War College, Carlisle Barracks, PA, 1976.

This document was prepared for student use at the U.S. Army War College. It presents a summary and critique of existing literature on general officer job requirements. According to the author, there has been very little systematic research done on the skills necessary at the general officer level. Much of the work is anecdotal, pieced together from autobiographies or self-report

data and hinges on an outmoded trait theory philosophy. As with most unresearched areas, the claim is that there are few commonalities among general officer positions and skills. The author stresses the need for research in this area which takes the situation as well as the individual into account.

- 1-15. Malone, D. M., COL & Penner, D. D. You can't run an army like a corporation. Army, 1980, 30(2), 39-47.

An essay by instructors at the U.S. Army War College delineating the differences existing between military and industrial organizations in objectives, organizational structure, and managerial roles. Because of these differences the authors caution against blindly following the dictates of industry and argue that the military should develop its own doctrinal literature.

- 1-16. Marples, D. L. Studies on managers: A fresh start. Journal of Management Studies, 1967, 4, 282-299.

The author reviews and evaluates the studies on managerial activities (e.g., how executives spend their time) and suggests a new methodological paradigm. He criticizes past research for their atheoretical approach, for using vaguely defined categories and an unreliable unit of analysis (the "episode") and for basing conclusions on self-reports that do not correspond to actual behavior. He suggests a model using effective problem solving (the principal executive goal) as a basis for categorizing and recording behavior.

- 1-17. Meyer, E. C., GEN. Leadership: A return to basics. Military Review, 1980, 60(7), 4-9.

The Chief of Staff of the Army presents a policy statement on the requirements for successful leadership and the relative importance of leadership and management in today's Army. While acknowledging that both are necessary, he notes that the two are neither synonymous nor interchangeable, and success in one does not necessarily guarantee success in the other. The Army has been concentrating on training managers to the exclusion of leadership, he argues, and it is time to reverse the emphasis. According to General Meyer, training should be aimed at developing the three basic requirements of a successful leader: character, knowledge (technical and human relations skills), and the ability to apply what is learned to actual situations. Armed with these skills, the leader will be able to motivate subordinates and instill a willingness to sacrifice (the primary leadership objectives) by developing in them a sense of loyalty, team spirit, trust, and confidence.

- 1-18. Mintzberg, H. The Nature of Managerial Work. New York: Harper & Row, 1973.

In this often-cited book Mintzberg argues that the traditional common-sense, nonempirical approach to describing managerial functioning is too general and not characteristic of actual managerial work. He highlights 10 necessary managerial functions/roles and

eight sets of skills based on a review of the managerial job research and his own study with five chief executive officers. The 10 roles are grouped into three broad categories: Interpersonal roles (figureheads, liaison, and leader), Information roles (monitor, disseminator, and spokesman), and Decision roles (entrepreneur, disturbance handler, resource allocator, and negotiator). The eight sets of skills seen as necessary to effectively accomplish these functions are: peer skills, leadership skills, conflict resolution skills, information processing skills, skills in decisionmaking under ambiguity, resource allocator skills, entrepreneurial skills, and skills of introspection. He points out that too much time has been spent discussing the necessary functions and too little time teaching the necessary skills. He also argues that these functions and skills are characteristic of all managers, regardless of level.

- 1-19. Murray, M. A. Comparing public and private management: An exploratory essay. Public Administration Review, 1975, 35, 364-379.

The author argues for a "generic" view of management: While the public and private sectors may differ in content area, specific goals and techniques, the management process is universal, and both engage in planning, coordinating, directing/motivating, and decision-making. There may be differences, says the author, but one must ask whether these differences actually affect the management process. The author's answer is a "cautious no," and predicts increasing similarity as the public and private sectors become more interdependent.

- 1-20. Nash, A. N. Vocational interests of effective managers: A review of the literature. Personnel Psychology, 1955, 18, 21-23.

This article reviews some 60 studies on managerial vocational interests. The general consensus, according to Nash, is that effective (as compared to ineffective) managers have stronger persuasive, verbal, and literary interests, a more positive interest in business-related occupations, and less of an interest in scientific and technical fields. Social service, humanitarian, and people-oriented interests were usually found to be positively correlated with effectiveness at lower managerial levels, but negatively related at the executive level. The reviewer suggests that executives understand the needs of others, but are not concerned with satisfying them unless they benefit the organization. Nash concludes that although effective managers were found to have an identifiable set of interests, the correlations were not high enough to warrant definitive statements.

- 1-21. O'Connor, M. G., RADM & Brown, D. S. Military contributions to management. Defense Management Journal, 1980, 16(2), 50-57.

This article argues for the similarity between managerial positions in industry and the military. It points out that the two sectors are constantly exchanging managerial theories and techniques, and describes 19 different managerial techniques that have been developed in the military and adopted by industry.

- 1-22. Porter, L. W. & Lawler, E. E., III. Properties of organization structure in relation to job attitudes and job behaviors. Psychological Bulletin, 1965, 64, 23-51.

This literature review includes a summary of the pre-1965 studies relating job attitudes and behaviors to different levels within industrial organizations. The studies summarized indicate that such factors as job and need satisfaction, amount of information received and processed, type of interpersonal relations, and type and nature of decisions all vary according to organizational level. The reviewers emphasize the importance of using level as a moderator variable in studies on organization structure and suggest that future research concentrate on the question of what it is about different levels that creates different job attitudes and behaviors.

- 1-23. Segal, D. R. Leadership and Management: Organizational Theory. Unpublished manuscript, University of Maryland, 1980.

The essay's theme is that both leadership and management functions are essential in military organizations, but they are not synonymous and should be distinguished. According to the author, they stem from different and conflicting philosophical traditions (leadership being linked to social philosophy and management to rational, individualistic cost/benefit models), require different sets of skills (interpersonal vs. technical and conceptual), are associated with different problem areas within an organization (e.g., morale and cohesiveness vs. logistics and systems analysis), and differ in relative importance according to rank and position (leadership being more essential at lower and management at higher command levels). The fact that they are distinct implies that individuals do not necessarily have the innate potential to develop both sets of skills. The author suggests the Army should take these differences into account when considering training, promotion, and duty assignments. (The manuscript makes a number of interesting suggestions that should be researched. However, it presents somewhat of a "straw man" argument, implying that most organizational psychologists and practitioners use the terms leadership and management synonymously, but citing no references to substantiate this claim. Also, the author's assertion that leaders are born, not made, has not received much empirical support.)

- 1-24. U.S. Department of the Army. Leadership at Senior Levels of Command. Department of the Army Pamphlet 600-15. Washington, October 1968.

This 1968 Department of the Army pamphlet recognizes three interrelated roles of senior officers, decisionmaking, management, and leadership, but focuses only on the latter. The major leadership function, according to the pamphlet, is human resource coordination, which involves policy formulation, monitoring goal accomplishment, and the development of a cohesive personnel system. The pamphlet emphasizes the last of these coordinating functions and the two sets of skills necessary to accomplish it: Diagnostic skills

(the ability to analyze a situation, note the critical elements, and formulate plans) and Action skills (plan-implementation through social influence). (Although 13 years old, this pamphlet remains the major U.S. Army statement on senior leadership doctrine. It may well be outdated since it is based largely on literature prior to 1965 that did not distinguish between senior and lower level leaders.)

- 1-25. Vroom, V. H. Motivation in Management. New York: American Foundation for Management Research, 1965.

This pamphlet reviews the managerial motivation literature prior to 1965. The review indicates that only a small number of the studies concentrated on the higher levels of management. Those few studies that did compare managerial motivation according to organizational level found higher level managers expressed a greater job satisfaction and a stronger desire for power, authority, and personal growth and development.

- 1-26. Welte, C. E. Management and leadership: Concepts with an important difference. Personnel Journal, 1978, 47, 630-633, 642.

This personal opinion essay by a management consultant/trainer argues for a distinction between leadership (ability to conduct interpersonal relations and influence people to take desired actions) and management (ability to coordinate diverse activities) because the functions and skills required of each are different and not necessarily correlated. He also argues for a distinction between "styles of leadership" and "leadership behavior" for the same reasons.

- 1-27. Wickert, F. R. & McFarland, D. A. (Eds.). Measuring Executive Effectiveness. New York: Appleton-Century-Crofts, 1967.

This volume contains eight papers on executive effectiveness by leading industrial psychologists from universities and businesses. (Since the contributions were originally prepared for a 1964 personnel research conference, the results reported may be outdated. However, the papers are well worth reading for examples of methodologically sound research and discussions of issues to be concerned with in assessing executive effectiveness. Two chapters from this volume are annotated separately (see 1-07, 2-01).)

- 1-28. Zaleznik, A. Managers and leaders: Are they different? Harvard Business Review, 1977, 55(3), 67-78.

The author suggests that managers and leaders differ in their roles, motivation, personal history, and how they think and act. Leaders are described as active change agents who use power to influence and require risk-taking ability, persuasive communication skills, and an ability to become emotionally involved with people and with goals. Managers, on the other hand, are seen as problem-solvers who are rational thinkers rather than doers. They are conservative compromisers who maintain an emotional detachment from

people and an impersonal passive attitude toward goals. Given these basic differences, the author suggests that it may not be possible for one person to have the characteristics of both.

SECTION 2: EMPIRICAL LITERATURE

Table 2 provides a content summary of the empirical works listed in this section. Of the 64 items, 11 describe studies with military samples only, 48 involve nonmilitary personnel, and 5 compare senior leaders from the military and nonmilitary sectors. Thirty of the listings deal only with the senior leader, and the remaining 34 are level-comparison studies. In the latter group are 31 studies that compared upper and lower management and three studies (01, 11, 58) which compared different levels of senior leadership. With respect to the subject matter, 28 listings concentrate on senior leader competencies, 24 emphasize job-related variables, and 12 are classified under both categories.

Most of the listings used interviews and/or questionnaire surveys of senior leaders, their superiors, or subordinates. However, other techniques were used as well. Some can be described as "managerial activity" studies (04, 06, 11, 30, 32, 34, 50, 60), involving studies on what managers actually do, based on self-reports or direct observations. In general, studies in this category employed very small sample sizes (usually fewer than 10) and report data in terms of percentage of time spent on various activities. Other listings (03, 13, 31, 61) discovered competencies by asking leaders to describe "critical incidences" and factor analyzing the results.

The majority of items describing competencies did not distinguish effective from ineffective executives, but simply concerned themselves with the characteristics of the "typical" executive. There were some exceptions, however (03, 05, 31, 36, 61, 62).

It is also difficult to evaluate the generalizability of much of the research reported, since most authors provide only qualitative interpretation of the data or, at most, summarize the results in terms of means and percentages. Notable exceptions are four level-comparison studies (03, 05, 31, 62) and one study with senior civilian naval executives (32).

Table 2

Descriptive Contents of Empirical Literature (Section 2)

	Organization Type			Target Group		Subject Matter	
	Military	Non-military	Mil-Nonmil Comparison	Senior Leaders	Level Comparisons	Competencies	Job-Related Variables
14	01	52	13	04	01	01	02
28	02	53	22	06	02	03	04
31	03	54	23	07	03	05	06
39	04	56	24	10	05	09	07
40	05	60	42	12	08	10	08
43	06	61		14	09	12	09
55	07	63		15	11	15	10
57	08	64		19	13	16	11
58	09			23	16	17	13
59	10			25	17	18	14
62	11			27	18	19	15
	12			30	20	20	19
	15			32	21	22	21
	16			33	22	24	23
	17			36	24	26	25
	18			37	26	27	28
	19			39	28	28	29
	20			40	29	31	30
	21			43	31	32	32
	25			44	34	33	34
	26			45	35	35	35
	27			49	38	36	39
	29			51	41	37	41
	30			52	42	38	46
	32			54	46	39	47
	33			55	47	40	48
	34			56	48	41	49
	35			59	50	42	50
	36			60	53	43	51
	37			61	57	44	53
	38				58	45	54
	41				62	48	55
	44				63	49	57
	45				64	52	60
	46					55	61
	47					56	63
	48					58	
	49					59	
	50					62	
	51					64	

- 2-01. Bentz, V. J. The Sears experience in the investigation, description and prediction of executive behavior. In F. R. Wickert & D. D. McFarland (Eds.), Measuring Executive Effectiveness. New York: Meredith Publishing Company, 1967, pp. 147-205.

The article describes the personal characteristics of effective Sears executives (store managers through corporate office executives) based on 2,458 responses to a test battery measuring interests, values, and personality traits. Among the characteristics associated with success were (1) a competitive drive for eminence and authority; (2) high stress tolerance and stamina; (3) intellectual skills (i.e., an ability to problem-solve, structural orderliness in thinking, and high verbal and quantitative aptitude); (4) social leadership skills, involving an ability to organize and motivate people toward goal accomplishment while maintaining detachment and objectivity; and (5) a lack of artistic interests. This description was generally true of executives regardless of geographic location and organizational level.

- 2-02. Blankenship, V. & Miles, R. E. Organizational structure and managerial decision-making. Administrative Science Quarterly, 1968, 13, 106-120.

This study was concerned with decision-making differences as a function of hierarchical level using questionnaire responses of 190 managers from 8 companies. Among the findings were: (1) senior leaders exerted a greater degree of autonomy at each successively higher level of management; (2) top level managers were more likely to make the final choice and to exert strong influence on decisions; and (3) top level managers relied heavily on subordinates for information and recommendations.

- 2-03. Boyatzis, R. E. The Competent Manager. New York: Wiley, 1981 (in press).

The study identified 19 job-related competencies of superior managers using a modified critical incidents technique. It was found that 16 of these competencies could be described by 5 competency clusters. The 5 clusters (and competencies within each) that distinguished superior from average managers were: Goal and Action Management (efficiency orientation, pro-activity, diagnostic use of concepts, concern with impact); Leadership (self-confidence, use of oral presentation, conceptualization); Human Resource Management (use of socialized power, group process management, accurate self-assessment, positive regard); Subordinate Direction (use of unilateral power, developing others, spontaneity); and Focus on Others (perceptual objectivity and self-control). "Stamina and adaptability," "logical thought," and "specialized knowledge" were identified competencies not associated with these clusters. The relative importance of each cluster varied as a function of level. The "Goal and Action Management" cluster was relevant to performance at all managerial levels and the "Leadership" cluster was relevant for middle and executive level managers. In addition, three other competencies predicted effective performance at the executive level: "perceptual objectivity," "managing group process,"

and "developing others." Differences were also found in comparisons between successful managers in the private and public sector. All competencies in the "Goal and Management" cluster, two of the "Leadership" cluster competencies (conceptualization and use of oral presentation), and the "managing group process" competency were demonstrated more often by managers in the private sector organizations than by managers in the public sector. An integrated competency model was developed based on the results of this study. (See 2-30 for a study using this technique with a military sample.)

- 2-04. Burns, T. Directions of activity and communication in a departmental executive group. Human Relations, 1954, 7, 73-97.

This study reports how and with whom four division managers in one department of a British engineering firm spent their time over a 5-week period. It was found that over three-fourths of their time involved face-to-face interaction, much of it among themselves. Also discrepancies were found between the managers' perceptions and actual behavior. The group underestimated the time spent with personnel, overestimated time involved with production, and frequently misperceived the intent of communications directed at them. The author suggests that the significance of lateral communication has been underestimated.

- 2-05. Butterfield, D. A. Leadership and organizational effectiveness. In P. E. Mott, Characteristics of effective organizations. New York: Harper & Row, 1972. Pp. 117-149.

Using two levels of management, the study compared the predictive power of four leadership theories by correlating subordinate ratings of leadership variables described by these theories with organizational effectiveness measures. None of the leadership variables were related to effectiveness at the lower organizational level. At the higher level, some (but not all) variables for each theory were correlated with effectiveness. All predictors belonged to "task orientation" and "group maintenance" leadership characteristics. The author concludes that leadership has a significant but limited relationship to effectiveness and suggests that other organizational variables must be considered along with leadership to understand effectiveness. The author also suggests that the lack of relationships at the lower management level may have been due to poorly constructed measurement instruments and do not reflect problems with the predictive power of the theories.

- 2-06. Carlson, S. Executive Behaviour. Stockholm: Stromberg, 1951.

This book reports one of the first significant empirical studies on how executives spend their workdays. It was based on self-reports from presidents of nine Swedish industries of varying sizes and functions over a 35-day period. Although there was a great deal of variability among subjects, results were discussed for the group as a whole in terms of the distribution of work time, communication patterns with subordinates, and work content. Among

the general findings were: (1) Executives experienced a heavy workload; (2) they had little control over the design of their workday; (3) there was very little uninterrupted time alone to think and plan; and (4) they spent a great deal of time interacting with subordinates and other visitors. The data on work content were difficult to interpret, according to Carlson, largely due to inadequacies in the methodology used. The author cautions against generalizing these results to other industries and other cultures because of the small sample size. He urges that more studies of this kind be undertaken and suggests that future research concentrate on the impact of the organizational environment on executive behavior.

- 2-07. Carson, I. How top men make up their minds. International Management, 1971, 26(4), 20-24.

A small international group of executives were asked to describe their decision-making styles, and this article records some of their responses. These executives pointed to the importance of subordinate influence, careful analysis, timing, and choosing an appropriate place to be alone to think.

- 2-08. Childs, J. E. & Ellis, T. Predictions of variation in managerial roles. Human Relations, 1973, 26, 227-250.

This study found support for the proposition that role dimensions are contingent on situational characteristics. Managers' perceptions of their jobs differed as a function of type of industry, degree of organizational structure, size, culture, job type, and organizational level. With respect to organizational level, senior leaders (as compared to middle managers) reported their work was less routine, perceived themselves as having more authority, and felt freer to initiate change. Unexpectedly, role clarity did not differ for the two levels. The authors conclude that "manager" is not a generic term and suggest that assessment and training programs be concerned with environmental characteristics.

- 2-09. Coates, C. H. & Pellegrin, R. Executives and supervisors. American Sociological Review, 1957, 22, 217-220.

Fifty executives and 50 first-line supervisors from 30 large Southern bureaucracies were asked to describe and compare their personal attributes through unstructured interviews. The article contains a qualitative summary of their responses focusing on perceptions of the executive and his role. Both groups described the executive as more personally competent (higher in intelligence and motivation, more self-confident and self-directed, etc.) and much better at carrying out the traditional executive role (planning, coordinating, motivating, understanding human behavior, etc.). Also, both groups were aware of the disadvantages of the executive's role (much stress and responsibility, little leisure time, etc.), and the supervisors cited these as reasons for why they would not want to be executives. The authors conclude that the groups see their roles as distinct, and are differentially motivated because their role requirements differ.

- 2-10. Day, C. R., Jr. How executives rate themselves. Industry Week, 1979, 202(6), 78-83.

Industry Week asked a select number of executives to rate themselves on management of time, delegation of work, working with the opposite sex, ability to organize work, coping with pressure, overall performance, and other items. Executives responding ranked themselves highest at meeting deadlines. Other high marks included abilities to self-start, run productive meetings, and analyze dilemmas. The number one nemesis of the executive was time management. The reasons for this weakness included: (1) complexity of management; (2) external influences; (3) delegation of problems; and (4) decisionmaking which results from committees or groups.

- 2-11. Dubin, R. & Spray, S. L. Executive behavior and interaction. Industrial Relations, 1964, 3, 99-108.

This study described the activities of eight junior and senior business executives from various departments of a large industry using a self-report technique. Results (reported in terms of percentage of time) indicated that executives spent the greatest proportion of time in verbal, face-to-face communication with associates outside their own departments and initiated rather than received the majority of communication. Within their own departments, the largest percentage of contacts were with "peers" (individuals of equivalent status and authority) as opposed to superiors or subordinates. Also, senior executives reported engaging in a number of activities simultaneously. This was not as characteristic of the junior executives. No general pattern was found regarding activity content (e.g., time spent planning, coordinating, etc.). (The authors suggest that this latter finding indicates functions differ according to specialty and level. However, the individual differences may also be attributable to such artifacts as the small sample size or lack of agreement on definitions as to what constitutes a particular activity.)

- 2-12. England, G. W. & Weber, M. L. Managerial Success: A Study of Value and Demographic Correlates. Minneapolis: Center for the Study of Organizational Performance and Human Effectiveness, University of Minnesota, 1972.

Using a salary/age ratio to define "success," this study compared the values and demographic characteristics of successful and unsuccessful managers. Results indicated that successful managers favored pragmatic, dynamic, achievement-oriented values, preferred to take an active role in interactions, and were willing to take risks to achieve organizationally valued goals. Unsuccessful managers preferred more static and passive values. (Although more successful managers were generally at the higher organizational levels, top managers could be found in both success groups. Hence, the results are only suggestive of executive personal qualities.)

- 2-13. Flanagan, J. C. Defining the requirements of the executive's job. Personnel, 1951, 29, 28-35.

The article introduces the "Critical Incidents Technique," a technique for defining job requirements by asking position holders to describe personal examples of outstanding and unsatisfactory performance. To illustrate this technique, it briefly summarizes results from two earlier studies carried out in the 1940s, one with Air Force officers and the other with research executives. In the Air Force officer study, 54 critical behaviors were identified and divided into six proficiency areas: handling administration details, supervising personnel, planning and directing action, organizational responsibility, personal responsibility, and military occupational specialty. Colonels and generals (as compared to other officers) reported a greater percentage of incidences involving personnel supervision and the planning, initiation, and direction of actions. The percentage of incidents reported in the other categories by these senior officers were relatively small. A comparison of senior military and research executives indicated that general officers and colonels reported more incidences involving fairness and ethics and fewer incidences dealing with idea-generation and the use of imagination in formulating plans. However, the author notes that comparison between these groups is difficult, given their very different objectives.

- 2-14. Franklin Institute, Art and Requirements of Command, Vol. 1, Summary Report. Vol. 2, Generalship Study. Vol. 3, Historical Studies. Vol. 4, Seventh Army Command Process Study. Philadelphia: Systems Science Department of the Franklin Institute, 1967.

This four-volume series, published during the Vietnam conflict, develops a detailed model of the necessary combat command functions at division level and above, based on three lines of inquiry: questionnaire responses from a cross-section of senior officers; a historical analysis of the methods, techniques, and procedures used by superior past commanders; and a questionnaire/interview program with active general officers of the Seventh Army, Europe. Volume I presents the model, and Volumes II-IV describe the studies upon which the model is based. The four-stage model depicts the effective senior combat commander as the center of an information transfer system (1) receiving relevant combat information; (2) organizing it into a directive; (3) monitoring the implementation of the directive; and (4) evaluating the implementation's effectiveness. The model emphasizes the importance of face-to-face communication, a free-flowing, two-way communication system, and flexibility in adapting to a changing environment.

- 2-15. Glickman, A. S., Hahn, C. P., Fleishmann, E. A., & Baxter, B. Top Management Development and Succession: An Exploratory Study. Supplementary Paper No. 27, American Institute for Research. New York: Committee for Economic Development, 1968.

Newly selected executives and those who chose them were asked for the criteria used in selection in order to discover how top management development decisions are made. It was found that

potential executives were identified early in their careers and moved up quickly. These "crown princes" were people who stood out by performing above expectations in lower managerial positions and by associating themselves with top level men. The only competencies identified were decisiveness and a willingness to take risks. The authors conclude that the specific requirements of an executive's position are not considered in selecting individuals.

- 2-16. Graen, G., Dansereau, F., Jr., & Minami, T. An empirical test of the man in the middle hypothesis among executives in a hierarchical organizational employing a unit set analysis. Organizational Behavior and Human Performance, 1972, 8, 262-285.

The "man-in-the-middle" hypothesis, which has been supported at lower management levels, states that superiors and subordinates use different criteria to evaluate their managers. The present study did not find much support for this hypothesis at the executive level. Superiors of successful steel industry executives saw them as structuring, domineering, and promoting both their own and their members' influence over the unit. In slight contrast, subordinates saw them in much the same way, but with "consideration" substituted for "domineering."

- 2-17. Gugliemino, P. J. Developing the top-level executive for the 1980's and beyond. Training and Development Journal, 1979, 34, 12-14.

This paper reports on the necessary managerial skills at different organizational levels as perceived by management professors, training directors, and mid-level managers. Conceptual, human, and technical skills were seen as important for all levels, but the "skill mix" differed in line with Katz' theory (see 3-24). The subjects perceived that the need for conceptual skills increases, technical skills needs decrease, and human skills needs remain about the same as one ascends the organizational hierarchy. The most critical conceptual skills at the executive level were perceived to be: (1) decisionmaking, (2) identifying opportunities and innovating for the good of the whole organization, (3) understanding and monitoring the business environment, (4) structuring the organization, (5) planning the multi-national corporations, and (6) thinking as one entrepreneur. All were thought to be somewhat difficult to teach.

- 2-18. Haire, M., Ghiselli, E. E., & Porter, L. W. Managerial Thinking: An International Study. New York: Wiley, 1966.

This cross-cultural study compared the perceptions and attitudes of managers at all levels from 14 countries. Although some differences were found, the authors report a great deal of similarity among managers from the different countries, with the U.S. managers most closely resembling those in England. This pattern of similarities overshadowing differences also held true in comparison between upper and lower management. Some differences were found, however, in the United States sample, as higher level managers reported being less democratic, more satisfied with their

jobs, and having more of their social autonomy and self-actualization needs fulfilled.

- 2-19. Heller, F. A. Managerial decision-making: A Study of Leadership Styles and Power Sharing among Senior Managers. London: Tavistock, 1971.

Two hundred and sixty British industrial executives (vice-presidents and division heads) responded to a questionnaire on the extent to which they involved subordinates in the decision-making process. The degree of power sharing depended upon perceived and actual personal characteristics of both the executives and their subordinates as well as a number of situational factors (task clarity, time constraints, span of control, job type, efficiency of the communication structure, and target of the decision). The author concludes that it is inappropriate to talk about the one "best" leadership style and stresses the need for a contingency approach to leadership.

- 2-20. Heller, F. A. & Yukl, G. Participation, managerial decision-making and situational variables. Organizational Behavior and Human Performance, 1969, 4, 227-241.

Organizational level was one of several situational factors in this study of decision-making styles at a large British industrial organization. Among the findings was that senior managers used a participation-style of decisionmaking more often than front-line supervisors. Also, the more experienced the senior manager, the more likely he was to share the decision-making function with subordinates.

- 2-21. Hemphill, J. K. Dimensions of Executive Positions: A Study of the Basic Characteristics of the Positions of Ninety-Three Business Executives. Columbus, Ohio: Bureau of Business Research, Monograph No. 98, 1960.

This study reports the results of a factor analysis on a 575-item position description questionnaire that was administered to 93 "executives" ranging from second-line supervisors (beginning managers) to those within three echelons of the president (upper management). Of the 10 factors identified, none were uniquely characteristic of upper management. In general, the factors were distinguished more by functional areas than by managerial level.

- 2-22. Holmes, D. S. A Report on an Evaluation of Twelve Brigadier General Designees. Unpublished manuscript. Center for Creative Leadership, Greensboro, N.C., 1978.

Using observations, interviews, and a psychological test battery, the study assessed and compared the personal characteristics of 12 newly selected brigadier generals with industrial executives and battalion commanders. An analysis of the test battery revealed more similarities than differences between the three groups, and that the brigadier generals were more similar to the industrial

executives than to the battalion commanders in many areas. In contrast to the battalion commanders, the brigadier generals and executives were found to function better in less structured situations and were more creative, outgoing, and flexible in their thinking. The author categorizes the 12 brigadier generals into three managerial types: "Dependable-cautious," "Outgoing," and "Potentially creative." He concludes that individual differences exist among officers and suggests that they should be encouraged to develop their unique strengths.

- 2-23. Hong, D. S. Retired military elite: Post-military employment and its socio-political implications. Armed Forces and Society, 1979, 5, 450-466.

The author reports that one-third of the retired senior military officers listed in such publications as "Who's Who in America" were employed by industrial firms in top level positions (division head or above), and concludes that skills developed in the military are transferrable. (This study lends some support to those who feel it is possible to generalize industrial findings to a military setting. However, it should be noted that the sample consisted of only the "military elite" and was not representative of top-level officers in general.)

- 2-24. Hunsinger, F. R. What successful managers say about their skills. Personnel Journal, 1978, 57(11), 618-621.

Using an open-ended questionnaire format, Air Force NCOs through colonels were asked to describe the major skills contributing to success. The researchers then grouped the responses into six categories: (1) Communication (read, write, speak, and listen); (2) Human Relations (empathize, understand people, consider subordinates); (3) Management (analyze problems, decisionmaking, and application of management principles); (4) Competence (technical skills and knowledge of unit requirements); (5) Leadership (how to motivate or direct people); and (6) Intangible Traits (intuition, judgment, personality, etc.). Their relative weightings differed according to level. For officers below the LTC rank, Communication, Human Relations, and Management were rated most important. The three most important skills of the LTC/COL group were Competence, Human Relations, and the Intangible Traits. Unfortunately, the data for LTCs and COLs were not analyzed separately. (It is also unfortunate that the author did not factor analyze the responses, for the components of some of his categories may not be highly correlated. For example, are both "technical skills" and "knowledge of unit requirements" necessary senior level competence skills, or is only the latter important?)

- 2-25. Hurtson, C. J., Jr. How often do executives delegate correspondence? Management World, 1978, 7(2), 12-14.

The author discusses the role of written communication in an executive's job based on results of a survey of top commercial

bank executives. He reports that most executives spent a good deal of time writing their own letters, but delegated some to subordinates. The percentage of letters delegated depended upon a variety of personal and situational factors. The author suggests that since the executive's writing responsibilities have greatly increased in recent years, he/she should learn to delegate more in order to ease the workload and develop subordinate writing skills.

- 2-26. Jago, A. G. & Vroom, V. H. Hierarchical level and leadership style. Organizational Behavior and Human Performance, 1977, 18, 131-145.

The study used self-report data to investigate the relationship between organizational level (supervisors vs. section heads vs. division heads) and leadership style (autocratic vs. participative). The tendency for managers to prefer participative over autocratic methods increased from lower to higher levels. The authors suggest that roles and situations differ between levels and are more conducive to participatory methods at the higher levels.

- 2-27. Jennings, E. E. You can't succeed in business by merely trying. Nation's Business, 1966, 54(5), 110-116. (Also in P. D. Grub & N. M. Loeser (Eds.), Executive Leadership: The Art of Successfully Managing Resources. Wayne, PA: MDI Publications, 1969. Pp. 99-104.)

The author employs the results of a survey of industrial chief executives to describe the pattern necessary to progress to the top of the organizational hierarchy. According to the author, the necessary skills and characteristics are developed through education and past organizational experiences. The author suggests that the following characteristics and skills should be developed: An ability to manage people regardless of their functional orientation or technical skills, a strong motivation for advancement, an awareness of the need for corporate visibility, and a thorough understanding of organizational principles.

- 2-28. Just, W. Military Men. New York: Alfred A. Knopf, 1970.

A journalist's impressionistic account of the characteristics and motivations of Army personnel during the Vietnam era, based on personal observations and interviews. In Chapter 4 ("The Generals"), the author depicts general officers as "managers" who are isolated from their men, strictly adhere to Army policy, and lack initiative, imagination, and innovation. They rose to the general officer level, according to the author, because they associated with the "right" people, performed well in combat assignments, and graduated from the "right" military schools. He does not discuss the colonel positions in much detail, but it is implied that they are very similar to general officers. In Chapter 8 ("The Colonel"), the author presents a case study of one colonel, who is described as a true combat warrior, with a decided dislike for managerial positions.

- 2-29. Kanter, R. M. How the top is different. In R. M. Kanter and B. A. Stein (Eds.), Life in Organizations: Workplaces as People Experience Them. New York: Basic Books, Inc., 1979. Pp. 20-35.

The author describes differences between executives and lower level managerial positions based on personal observations and interviews. The executive position is seen as involving much more uncertainty as jobs are relatively unstructured, tasks are non-routine, and decisions must be made about a variety of unknown elements. She also indicates that executives are more open to public scrutiny, there is greater pressure toward conformity and less of a distinction exists between work and leisure.

- 2-30. Kelley, J. The study of executive behavior by activity sampling. Human Relations, 1964, 17, 277-288.

The article reports the results of an observational study in which the behaviors of four section managers in a British manufacturing firm were randomly sampled over a 3-week period. Results showed that all four managers spent approximately two-thirds of their time interacting with other company employees. Subordinates took up the greatest proportion of this contact time, followed by peers and superiors. With respect to the content of the activities, Kelley reported that the majority of the managers' time (three-fourths) was spent supervising and performing technical functions. While these patterns held for all four section managers, the actual proportions of work actively differed according to the nature of the individual manager's job. Kelley notes that those managers most similar in function had the most similar behavior patterns and concludes that the nature of the job rather than personal qualities determine what managers do. (While Kelley describes it as a study of executive behavior, it is not clear that section managers are, in fact, senior leaders. Kelley categorizes a section manager as one who "... is responsible for maintaining a high level of technical efficiency on his lines ... must meet standards of efficiency operations set by the unit manager ... [who reports directly to the president] ... [and] ... is responsible for establishing and maintaining on his section safe standards of work and a high standard of cleanliness and tidiness" (p. 281). Unfortunately, there are no agreed-upon guidelines for distinguishing among levels. However, this description, with its concern for the day-to-day functioning of the company, would appear to be more characteristic of junior rather than senior leaders.)

- 2-31. Klemp, G. O., Jr., Murger, M. T., & Spencer, L. M., Jr. Analysis of Leadership and Management Competencies of Commissioned and Non-commissioned Naval Officers in the Pacific and Atlantic Fleets. Boston, MA: McBer and Company, 1977.

This study attempted to identify skills/competencies of naval officers in the Pacific and Atlantic fleets, using a modified critical incidents technique. Twenty-seven competencies were identified and factor analyzed into five basic clusters: "Task

Achievement," "Skillful Use of Influence," "Advising," and "Counselling," "Management Control," and "Coercion." Components of the first three were found to be especially effective in differentiating superior from average senior officers. The "Task Achievement" components which differentiated superior from average senior officers were concern for achievement, taking initiative, setting goals, and coaching. With respect to the "Skillful Use of Influence" category, superior leaders expressed more concern with influence, were more skilled in conceptual analysis, and were more likely to use persuasion and explanation to motivate subordinates. These senior officers also reported significantly more actions to foster teamwork and showed controlled emotions. With respect to "Advising and Counselling," superior officers showed a greater ability to listen, understand, and help subordinates. They also expressed more statements of belief in subordinates' basic worth and ability to perform.

- 2-32. Lau, A. W., Broedling, L. A., Walters, S. K., Newman, A. N., & Harvey, P. M. The Nature of the Navy Civilian Executive Job: Behavior and Development. San Diego: Navy Personnel Research and Development Center, 1979.

The study analyzed the activities, function, and skills of Navy civilian executives using a multimethod approach. Executive job characteristics included long working hours, job variety, fragmental work patterns, a great majority of time spent with other individuals, shared responsibilities, and a great deal of felt pressure to produce. A factor analysis of work activities identified four major executive functions: (1) leadership, (2) decisionmaking, (3) technical problem solving, and (4) the seeking and dissemination of information between the organizational unit and the outside world. Five sets of skills were perceived as necessary for effectively accomplishing the above activities and functions: (1) interpersonal/leadership skills (ability to communicate, listen, persuade, use employee incentives, and effectively interact with other people); (2) administrative/managerial skills (capability to view the organization systemically, allocate resources, manage crises, and plan, direct, and evaluate the unit's work); (3) technical skills; (4) environmental/informational skills (ability to interface with the external environment); and (5) personal skills (achievement and risk-taking orientation, conceptual ability for differentiation and integration). The leadership and managerial skills were rated as contributing most to effective performance. The authors conclude that one must be aware of the systemic characteristics impinging on executives to describe and understand their behavior and suggest that training programs should be based on empirically identified functions and skills.

- 2-33. Maccoby, M. The Gamesman: The New Corporate Leaders. New York: Simon & Schuster, 1976.

The author, a psychoanalytically trained clinical psychologist, develops a psychological portrait of the "typical" executive

of 1970, based on interviews with 250 business managers. He describes four ideal types: the Craftsman, Jungle Fighter, Company Man, and Gamesman, the latter being the most typical of today's effective executive. The Gamesman is described as an individual who loves change and wants to influence its course. He values flexibility, individuality, and risk-taking; fears being controlled; and looks at work as competitive contests that must be won.

- 2-34. Martin, N. H. The level of management and their mental demands. In W. L. Warner & N. H. Martin (Eds.), Industrial Man: Businessmen and Business Organizations. New York: Harper & Brothers, 1959, pp. 274-294.

Using observations, interviews, and examination of written correspondence, this study compared decision-making situations at four managerial levels of a large industry (works manager, division superintendent, department foreman, and shift foreman). Results indicated that the type of social relationship and decisions encountered varied in both degree and kind by level. In comparison to the communication pattern of lower level managers, the top managers spent more time with others outside their own work group, had fewer face-to-face contacts, and communicated less with people at their own level. Decisionmaking at the higher managerial level was characterized by more distant time frames, a greater degree of abstractness, and less structure. The author suggests that different forms of intellectual functioning and personality are required at each of the levels of management.

- 2-35. Maude, B. Leadership in Management. London: Business Books, 1978.

The author's purpose is to develop a practical guide on how to become an effective businessman/executive. The information presented is largely based on personal interviews, biographies, and other literature on what managers (mostly executives) actually do, and what they themselves have to say about leadership and management. "Academic" leadership theories are purposefully ignored as being irrelevant. After reviewing the "evidence," Maude concludes that (1) managers are hard-working, competitive, and pro-active rather than reactive; (2) the effective leadership style is situation-dependent; and (3) similar skills are necessary at all levels, but executives must be especially adept at planning, decisionmaking, applying firm controls to cash flow and budgeting, developing cohesive teams, and face-to-face communication.

- 2-36. McClelland, D. C. & Burnham, D. H. Power is the great motivator. Harvard Business Review, 1976, 54, 100-110.

The authors discuss the results of a study comparing the motive patterns, leadership styles, attitudes and interests of (subordinate-defined) effective and ineffective executives. The effective executive (i.e., one who enhances employee morale) is characterized as an "institutional" manager who displays a democratic leadership style, is more concerned with organizational goals than with personal achievement, has a high inhibition need

(which describes a controlled, disciplined individual), and a greater need for social power than for affiliation. Other distinguishing characteristics include a keen sense of social justice or equity, a willingness to seek expert advice, low egocentrism and defensiveness, a positive attitude toward work, a long-range perspective, and active membership in a number of outside organizations. (It should be noted that the effectiveness criterion was morale rather than performance. A much different profile may have emerged if the latter criterion were used.)

- 2-37. McLennon, K. The manager and his job skills. Academy of Management Journal, 1967, 3, 235-245.

A survey of 520 sales, finance, and personnel managers (department managers to presidents) found moderately high agreement in the rankings of 65 job skills. Oral communication, writing skills, basic academic skills (e.g., economic principles, statistics, etc.), and a thorough knowledge of the organization and its employees were among the skills perceived as most important. Specific technical area knowledge (e.g., principles of insurance, corporate finance, etc.) was not seen as very important. There were differences in rankings according to functional area and organization size, however, leading the author to conclude that skills are not totally transferrable from department to department or from one organization to another.

- 2-38. Miner, J. B. & Miner, M. G. Managerial characteristics of personnel managers. Industrial Relations, 1976, 5, 225-234.

This study compared the personal characteristics of middle and upper personnel managers. The results indicated that top managers expressed higher needs for achievement and self-actualization and lower needs for financial reward and security. Top managers were also found to be more motivated to perform their roles and scored higher on supervisory ability, intelligence, decisiveness, and initiative.

- 2-39. Mylander, M. The Generals. New York: Dial, 1974.

This book describes the demographic characteristics, attitudes, motivation, and lifestyles of general officers. It is based on available demographic data, unstructured observations, and interviews as subjectively interpreted by this journalist. In Chapter 9 ("Jobs Generals Do"), Mylander describes the different positions generals hold, as well as how they spend their time. She characterizes a general's job as involving long hours spent on a lot of different activities usually concerned with "trivial" day-to-day operations and ceremonial functions. Much of the time is spent in conferences and meetings with both military and non-military personnel and he/she has very little time alone to think and plan.

- 2-40. Penner, D. D., Malone, D. M., Coughlin, T. M., & Herz, J. A. Field Grade Officer Leadership. Leadership Monograph Series No. 6. Ft. Benjamin Harrison, IN: U.S. Army Administration Center, October 1974.

This is one of the monographs in the "Leadership for the 1970s" series (see also 1-06, 2-56). It summarizes the most important leadership behaviors of field grade officers (majors through colonels) as perceived by the field grade officers, their superiors, and subordinates. While a number of differences existed between the three sets of ratings, there was substantial agreement on the most important field grade officer behaviors: awareness of unit morale, technical competence, effective communication with subordinates, knowledge of men and their capabilities, and the establishment of high performance standards. The following differences existed between the three sets of ratings. Field grade officers emphasized making their desires and expectations known to their subordinates, superiors were concerned with the field grade officers' attitude toward their job and with the ethical issue of distorting reports, and subordinates emphasized field grade officer personal characteristics. All three groups perceived the field grade officer as establishing and maintaining too high a level of discipline. (The results reported here may be only suggestive of senior officer behavior, however, since the colonel data were not analyzed separately, and there may, in fact, be differences in functions and skills between major and colonel positions. Also, it is difficult to evaluate the results since they are only summarized with no statistical analyses presented.)

- 2-41. Porter, L. W. & Ghiselli, E. E. The self-perceptions of top and middle management. Personnel Psychology, 1956, 10, 397-407.

The researchers asked middle and top level managers to describe their personal traits on an adjective checklist and found two very different sets of self-perceptions. Each group described themselves as possessing characteristics that fit the position they occupy, according to the researchers. The traits reported by top managers (e.g., active, candid, self-reliant, willing to take risks, etc.) were characteristic of the action-oriented, creative planner of general policies, while the middle managers described themselves with traits that fit the role of a translator of broad policy into specifics (e.g., cautious, conforming, methodical, etc.). The authors conclude that each sees his role as being different from those of the other managerial group.

- 2-42. Porter, L. W. & Mitchell, V. F. A comparative study of need satisfaction in military and business hierarchies. Journal of Applied Psychology, 1967, 51, 139-144.

Air Force personnel completed a questionnaire measuring need satisfaction and fulfillment. The results for three levels of commissioned officers were compared to previous results for analogous levels of civilian managers (BG/COL vs. vice-presidents; LTC/MAJ vs. upper middle managers; CPT/LT vs. lower middle managers). Among the findings were: (1) Need satisfaction increased at higher

organizational levels in both military and industrial samples. (2) Military officers were more dissatisfied across all ranks as compared to their civilian counterparts. (3) At the senior management level, the BG/COL group showed a higher level of satisfaction on the social and safety needs than the civilian vice-presidents but were lower on autonomy, esteem, and self-actualization needs.

- 2-43. Puryear, E. G., Jr. Nineteen Stars. Washington, D.C.: Coiner Publications, 1971.

The book highlights those skills necessary to be a truly great commanding officer by describing the careers and characteristics of four retired Army generals (GEN George S. Patton, Jr. and Generals of the Army George C. Marshall, Douglas MacArthur, and Dwight D. Eisenhower), based on interviews with people that knew them. Among the common characteristics cited were: inner strength, knowledge of one's craft, ability to inspire confidence in one's men, power to bring out the best in men, ability to triumph over adversity, equity, humanity, courage, the ability to make decisions, a desire to be a commander, and a willingness to dedicate oneself to becoming an effective commanding officer.

- 2-44. "Qualities needed for a successful chief staff executive," Association Management (Special Issue: "Leadership"), 1978 (November), 54-55.

Using one open-ended question, chief staff executive officers and members of the Foundation of the American Society of Association Executives were asked to describe the necessary qualities of an effective chief staff executive. This article highlights the major findings. Both groups agreed on the skills that were most important ("interpersonal/human relations" and "hard work") and least important ("communication skills" (e.g., speaking and writing ability) and "leadership"). "Planning and intelligence" were considered more important by staff executives than members while members evaluated "integrity" and "knowledge of others" higher than did the staff executives. (The fact that individuals in this nonindustrial organization evaluated "communication" and "leadership" as relatively unimportant executive skills may indicate that functions and skills differ according to the type of organization. Also, the fact that members and executives of this organization have different perceptions may indicate that perceived skills differ as a function of level. However, it is difficult to draw substantive conclusions from the study since the rationale used to develop and define the classification system categories is not given.)

- 2-45. Reeser, C. Executive performance appraisal--The view from the top. Personnel Journal, 1975, 54, 44-46, 66-68.

Reeser asked 14 chief executive officers of multimillion-dollar companies to describe the characteristics they consider most important in evaluating their vice-presidents and then

subjectively grouped the responses into skills/characteristics categories. Profit-making ability was considered the most important skill by a majority of the respondents. Other significant skills included the ability to select and develop future managers, the ability to motivate, to get along with peers, and the ability to present the company in a favorable light to outside sources. Among the personal characteristics rated highly were: integrity, commitment to hard work, long hours, and depth of thinking. (Unfortunately, the competency categories were not very well defined by the author. The vagueness was due in part to the actual answers given by the chief executive officers (e.g., "he must show me a really high-level thinking process"). This may indicate that the executives themselves are not at all clear on the specific criteria for effectiveness.)

- 2-46. Rosen, H. Desirable attributes of work: Four levels of management describe their job environments. Journal of Applied Psychology, 1961, 45, 156-160.

Using a structured questionnaire, managers at four different levels of a farm implements industry were asked to describe how characteristic each of 24 job/organizational climate conditions was to their jobs. No differences were found between top and mid-level managers. However, the positive job conditions were seen as more characteristic by top and middle managers than by those at the lower two levels. The author concludes that the higher one goes in the organization, the more positive is the organizational climate when the organization is broken up into a two-level tier. (The applicability of these results to executives is somewhat questionable. While the highest organizational level sampled was said to be composed of "top level managers," these people were described as subordinates of the general manager. Hence, they may in fact have been closer to mid-level managers rather than to the executive class. Also, none of the 24 items received more than a "moderately important" rating, suggesting that the conditions chosen did not adequately describe the managers' jobs.)

- 2-47. Rosen, H. & Weaver, C. G. Motivation in management: A study of four managerial levels. Journal of Applied Psychology, 1960, 44, 386-392.

Using a structured questionnaire, managers at four different levels of a large farm implements plant were asked to describe how important each of 24 job/organizational climate conditions was for them. There was a high degree of commonality across all four levels and the authors suggest that "management" may be described as a generic class, with managers at all levels sharing perceptions about what they want from their jobs. (Since this study used the same methodology as the Rosen (1961) study (see 2-46), the same criticisms apply.)

- 2-48. Sayles, L. R. Leadership: What Effective Managers "Really" Do--and "How" They Do It. New York: McGraw-Hill, 1979.

The book describes managerial functions, activities, and personal characteristics based on the author's own studies and other published works. The author emphasizes that all managerial roles (especially at the executive level) can only be described in the context of the complex, ever-changing organization of which the manager is a part. In line with this systems orientation, managerial behavior is described in terms of "contingency responses" (coping with threats to the integrity of the system) and "uncertainty reduction" (adapting to changes). Both functions require individuals who persevere, are flexible, have a high frustration threshold, have the ability to understand and integrate the inter-related elements of the organization, and have the ability to interact with and persuade members of the vertical and horizontal system.

- 2-49. Shartle, C. L. Executive Performance and Leadership. Englewood Cliffs, NJ: Prentice Hall, 1956.

The author uses his own personal experiences, earlier theoretical writings, and past research results (largely based on the Ohio State Leadership Studies series) to describe effective executive behaviors. As with most publications in the Ohio State series, the book emphasizes subordinate/superior relationships and the importance of "consideration" and "initiating structure" behaviors. However, it also discusses other aspects of the organization's internal and external environment as being important to fully understand and predict effective executive functioning.

- 2-50. Stewart, R. Managers and Their Jobs. London: MacMillan, 1967.

In a study of what managers actually do, middle and senior British managers were asked to keep a diary recording where and with whom they spent their time over a 4-week period. (Managers were also asked to record job functions, e.g., planning, sales, etc., but the data proved to be unreliable and was not reported.) Results showed that activities did not differ by level or by job type (e.g., sales, production, etc.). Rather, they varied on the basis of amount of contact with other people, who that contact was with, and the amount of uninterrupted time. Stewart suggests that training programs should be developed on the basis of these criteria, rather than by position or organizational level.

- 2-51. Stryker, P. Who are the executives?--I. In FORTUNE, The Executive Life. Garden City, NJ: Doubleday, 1956. Pp. 15-26.

This chapter summarizes the results of a FORTUNE magazine study on executive functions, based on a survey of over 1,100 executives, lower level managers, and professional consultants. Respondents generally agreed on the functions of an executive (planning, delegating responsibility, organizing, coordinating, etc.). They also agreed that an executive can be distinguished from a manager (i.e., an executive develops plans and a manager

implements them). However, there were differences of opinion as to who constitutes the "executive class." Some believed that since most managers perform executive functions, most managers are executives. Others indicated that the "real" executives are only the "top few."

- 2-52. Sussman, J. A. Making it to the top: A career profile of the senior executive. Management Review, 1979, 68(7), 15-21.

The article summarizes the results of a survey administered to 1,700 executives in 750 of the largest U.S. companies, asking them to describe personal characteristics associated with their success. "Concern for results," "integrity," and "desire for responsibility" were mentioned most often as necessary for improving an executive's chances for reaching the top, and "hard work" was seen as the biggest single factor for successfully accomplishing executive duties. "Exceptional intelligence," "conceptual ability," and "technical competence" were mentioned by only a small percentage of those questioned.

- 2-53. Tannenbaum, A. S., Kavcic, B., Rosner, M., Vianello, M., & Wieser, G. Hierarchy in Organizations. Washington: Jossey-Bass, 1974.

This book presents the results of a series of cross-cultural studies on factors related to power and its distribution in industrial organizations. In Chapter 6 ("Gradience of Reaction and Adjustment"), a study is described indicating that job satisfaction and personal adjustment increased steadily from lower to higher organizational levels. The authors suggest that these results reflect the unique job characteristics and demands present at each level. They note that the levels differ on such dimensions as degree of power, status, control, structure, pay, job challenge, interest, etc., and it is these organizational differences which account for the psychological differences observed.

- 2-54. Tornow, W. W. & Pinto, P. R. The development of a managerial job taxonomy: A system for describing, classifying, and evaluating executive positions. Journal of Applied Psychology, 1976, 61, 410-418.

This study developed and cross-validated the Management Position Description Questionnaire (MPDQ) for describing the job content of executive positions in terms of their responsibilities, concerns, restrictions, demands, and activities. A factor analysis of the MPDQ responses revealed 13 independent job factors. All positions were then compared and grouped into 10 homogeneous clusters in terms of the similarities and differences in their 13-factor job profiles. Possible applications of this taxonomy to major areas of personnel psychology are discussed.

- 2-55. Trussell, J. B. B., Jr., COL. "Professional generalship" and the USAWC curriculum. Carlisle Barracks, PA: U.S. Army War College, 1971.

Using the 1971 general officer assignment list and the subjective opinions of general officer assignment experts, the author identifies general officer positions, functions, and skills. General officer positions were classified into five job types: Management/Administration, MAAGS/Military Diplomacy, Operations/Tactics, Policy/Strategy (mostly 09 and 010 positions), and Branch Material (mostly 07 and 08 positions). According to the general officer assignment experts, major functions and skills involve interactions with nonmilitary personnel and agencies. Other necessary functions and skills are in the areas of management/administration, subjective appraisal, and legal matters, especially as they affect the military/civilian interface. The author emphasizes the importance of communication skills in dealing with the external environment. (Although this study provides some valuable information, it should be noted that the author is a speech writer and his conclusions may have been affected by his personal biases. It may be necessary to replicate this study before drawing any firm conclusions.)

- 2-56. "Understanding today's young executive," Nation's Business, 1977, 65(9), 90-94.

This popular magazine article describes the personal qualities of today's "young executives" (no definition given), based on a survey of business college deans. These executives are portrayed as aggressive, realistic, independent, and impatient individuals who have a greater concern for social issues and the external environment than past executives but are less influenced by organizational loyalties. They also lack listening skills, and an appreciation of long-range thinking and "a balance between thinking and action" (also not defined).

- 2-57. U.S. Army War College. Leadership for the 1970s: USAWC Study of Leadership for the Professional Soldier. Carlisle Barracks, PA: October 1971.

Using interviews and a structured questionnaire on leadership principles and functions, this study measured leadership climate, attitudes, and expectations as perceived by Army NCOs through colonels. The following findings are especially relevant to senior leadership: (1) Degree of satisfaction with Army leadership increased steadily with grade level. The respondents indicated least satisfaction with junior NCO leadership and were most satisfied with the leadership at the general officer level. (2) The perception of the relative importance of specific leadership principles varied among grade levels. (3) The extent to which officers and NCOs are perceived to successfully perform their leadership functions depends upon the grade level and the particular function measured (i.e., the functions which respondents indicated colonels perform adequately (or inadequately) were not the same as those for lower levels). The report also contains an

7

annotated bibliography of 176 leadership publications prior to 1971 that were used by the authors to develop the questionnaire and hypotheses.

- 2-58. U.S. Army War College. Senior Service College Position Validation Study. Unpublished Manuscript, Carlisle Barracks, PA, 1979.

The manuscript reports preliminary results of a senior officer job analysis. Using a self-report questionnaire format, colonels and general officers rated 73 skills (grouped into the seven skills/knowledge areas taught at USAWC) on importance and level of expertise required to accomplish their duties. The most important perceived needs of both general officers and colonels appear to be in the leadership area ("communication skills" and "personal qualities associated with effectiveness") followed closely by managerial skills ("decision-making techniques" and "knowledge of organizational systems and procedures"). Military skills and knowledge of domestic and international issues were seen as more necessary for general officers than colonels, but neither group considered them as important as the leadership and management skills. While the rank ordering of these skill categories on perceived importance and required expertise level were the same at both senior officer levels, general officers reported requiring a greater level of expertise in all subareas, especially in the military skills and knowledge of domestic and international issues areas. Among colonels, slight differences existed in the skill rankings as a function of job type, particularly on the less necessary skills (e.g., military skills, domestic and international knowledge). However, the ratings on perceived importance and required skill level appear to be fairly consistent among colonels, regardless of educational background, source of commission, or type of position. (The study is an excellent first step in learning about the necessary skills and functions of senior leaders. However, one should be cautious about drawing any firm conclusions from this preliminary data analysis. Only descriptive statistics are reported; there appears to be a great deal of variability among respondents, and the skill items were grouped on the basis of face validity only. Also, since the researchers chose skills reflecting the USAWC curriculum, they may not necessarily reflect all (or even the most important) senior leadership skills.)

- 2-59. Van Nostrand, S. J. & Wallis, M. R. General Officers' Views on Continuing Education/Updating Program for General Officers. Research Problem Review 78-3. Alexandria, VA: U.S. Army Research Institute for the Behavioral and Social Sciences, April 1978.

The report provides a qualitative summary of questionnaire responses by general officers concerning the need for general officer continuing education programs. Although there were differences of opinion, the majority of general officers indicated that there was a need for such a program, and that it should involve information updates on policy changes. One of the open-ended questions asked for areas in which the general officers were least prepared.

"Management skills" (installation, financial, and resource) were mentioned most frequently. This was followed by "civilian personnel" and "modern training methodology." Unfortunately, these latter categories were not defined. This survey also included a question on the most important trainable personal traits officers (at all ranks) should have. There was very little agreement as no single trait was mentioned by more than 4 of the 50 general officers sampled, and 2 of the officers suggested that, "by the time an officer makes general, whatever traits he has are fixed."

- 2-60. Whitely, W. T. Nature of managerial work revisited. Proceedings of the Eighty-Fourth Annual Meeting of the Academy of Management, San Francisco, 1978, 195-199.

Using a time sampling technique and a position description questionnaire, this study attempted to describe the activities and functions of seven senior industrial managers. There was a great deal of variability in the measures and no significance tests were used on this small sample. However, the author characterizes his executives as spending most of the time (1) verbally communicating, (2) in formal meetings, (3) of short duration, (4) with one or two people, usually subordinates. The content of the activities focused around transmitting and receiving information rather than decisionmaking. Also, the executives reported that complexity and stress are not characteristic of their work.

- 2-61. Williams, R. E. A description of some executive abilities by means of the critical incidents technique. Unpublished doctoral dissertation, Columbia University, 1956.

Using a sample of 742 manufacturing executives (general managers through board chairmen), critical incidents describing especially effective and ineffective performance were accumulated by interviews. Eighty-two critical job requirements were identified and grouped into the following six categories: planning, organization, and execution of policy; relations with associates; technical competence; work habits; adjustment to job; and coordination and integration of activities.

- 2-62. Winter, D. G. Navy Leadership and Management Competencies: Convergence among Tests, Interviews and Performance Ratings. Boston, MA: McBer and Co., 1978.

This is a follow-up to the Klemp et al. (1977) study on naval officer competencies (see 2-31). The report describes the development and validation of a test battery to measure the skills identified in the earlier study. Many of the test battery variables significantly correlated with competencies of the early study were significantly related to ratings of overall performance for leadership and management skills but not for technical competencies. The specific correlation patterns depended upon organizational level. At the highest officer level sampled (executive officers and commanding officers), the most important prerequisite of superior performance was found to be concern for the controlled use of

influence and its impact on others. The better officers at this level were also found to have superior scheduling skills and to manage by optimizing (making the best of a situation and getting others to work together). Their motive pattern showed a high inhibition need and a high need for social power relative to affiliation. Also, they were more oriented toward organizational accomplishment than self-gain.

Additions

- 2-63. Wortman, M. S. & Sperling, J. Defining the Manager's Job. New York: AMACOM, 1978.

This is largely a handbook of position descriptions of top and mid-level managers (mostly the latter) from 142 organizations. The author suggests that descriptions of top officials are not done very much because many believe the duties are quite clear and require no formal description.

- 2-64. Ghiselli, E. E. Managerial talent. American Psychologist, 1963, 18(10), 631-642.

The author discusses the importance of five competencies for effective management (supervisory ability, initiative, self-assurance, perceived occupational level and intelligence), and describes the results of a research program where questionnaire measures of these characteristics were correlated with self- and other-ratings of performance at different organizational levels. Supervisory ability, self-assurance, and perceived occupational level (a measure of aspirations) were found to increase as a function of organizational level. Initiative was highly associated with performance at mid-level and top management, but showed no relationship at the lower management levels. In general, intelligence increased as a function of level. However, at the highest organizational level, those executives in the top 3% of the I.Q. scale showed a negative relationship with performance. The author concludes that those who progress up the organizational ladder are well endowed intellectually, gifted with the capacity to direct others, self-stimulated to action, confident in their abilities, and strive for positions where their abilities can best be utilized.

SECTION 3: NONEMPIRICAL LITERATURE

Most of the 43 listings in this section are conceptual pieces and have been included in this bibliography as possible sources of testable hypotheses for future research. Table 3 summarizes their content. Like the empirical literature, most of these listings are from the private sector. The military contributions include four personal opinion essays by senior officers on the needed competencies of top level leaders (04, 30, 31, 36), two documents on official Army policy (38, 39), one essay projecting future skill needs (42), and a sourcebook on Professional Military Education (43). Only one personal opinion essay (05) could be found that compares the necessary competencies of military and nonmilitary senior leaders.

Many of the listings can be classified as "practical guides for the successful executive" and are based largely on conventional wisdom and the authors' personal experiences as consultants or senior leaders. Some emphasize executive functions (02, 08, 10, 37); others concentrate on competencies (03, 07, 11, 14, 17, 21, 22, 30, 31, 33, 36) and some discuss both (05, 09, 12, 13, 18, 28). Of these listings, four (02, 08, 10, 37) are considered "classics." Collectively known as "Functional Theories," they were written in the first half of the twentieth century and serve as a basis for much of the current literature.

Some are based on more than personal experiences, as the authors also use the existing theoretical and empirical literature to develop their ideas. Of these, some emphasize competencies (01, 06, 15, 16, 20, 24, 34); others discuss job-related variables such as what executives actually do (27, 32, 41), their roles (26, 27), and the importance of the internal-external environment interface (25). Three others in this classification discuss the need for matching competencies with a particular job (04, 29, 40).

Four of the listings that base their ideas on more than personal experiences (19, 23, 24, 35) have been especially influential in stimulating other empirical and nonempirical contributions. All are theories that postulate differences in functions and/or skills according to hierarchical level. These theories were derived from observations in industrial organizations, but all claim to be applicable to other organizations as well.

Table 3

Descriptive Contents of Nonempirical Literature (Section 3)

Organization Type			Target Group		Subject Matter		
Military	Non-military	Mil-Nonmil Comparison	Senior Leaders	Level Comparisons	Competencies	Job-Related Variables	
04	01	05	01	42	06	01	02
30	02		02	43	19	03	04
31	03		03		23	04	05
36	06		04		24	05	08
38	07		05		26	06	09
39	08		07		35	07	10
42	09		08			09	12
43	10		09			11	13
	11		10			12	18
	12		11			13	19
	13		12			14	23
	14		13			15	25
	15		14			16	26
	16		15			17	27
	17		16			18	28
	18		17			19	29
	19		18			20	32
	20		20			21	35
	21		21			22	37
	22		22			23	40
	23		25			24	41
	24		27			28	42
	25		28			29	
	26		29			30	
	27		30			31	
	28		31			33	
	29		32			34	
	32		33			36	
	33		34			38	
	34		36			39	
	35		37			40	
	37		38			42	
	40		39			43	
	41		40				
			41				

- 3-01. Argyris, C. Characteristics of successful executives. Personnel Journal, 1953, 32, 50-55.

The author describes 10 characteristics of successful executives, based on his own personal observations. He suggests that successful executives exhibit high frustration thresholds, encourage full participation, continually question themselves, accept competition, express hostility tactfully, accept victory as well as defeat with controlled emotions, understand they are limited by their environment, strongly identify with some group, and seek realistic goals.

- 3-02. Barnard, C. I. The Functions of the Executive. Cambridge, MA: Harvard University Press, 1938.

Although it has been criticized for its esoteric style and use of vaguely defined terms, this often-cited book is considered a (if not "the") classic in the area by both theoreticians and practitioners. Based on the author's personal experiences as an executive, it provides a sociological analysis of formal organizations (industrial as well as nonindustrial) and their relation to executive functions (control, management, leadership/supervision, and administration). He suggests that an effective executive is one who can successfully formulate policy, coordinate all elements (human and nonhuman), and develop an efficient communication system. Communication and interpersonal skills are considered essential to accomplish these functions. He also draws a clear distinction between "executive" functions and "executive" positions, arguing that the functions are exercised by all those in positions of control, regardless of level.

- 3-03. Basil, D. C. Measuring Skills for Executive Action. New York: American Management Association, 1970.

This American Management Association publication offers suggestions to executives on how to improve their functioning. The book discusses managerial skills (how to design and implement controls, set objectives, and structure/coordinate) and interpersonal/leadership skills (understanding human behavior and motivation). The author suggests that these two sets of skills become increasingly important the higher one rises in the organization. He also mentions that leadership and management skills are complemented by conceptual skills but he does not discuss these latter skills directly.

- 3-04. Bletz, D. F., COL. The modern major general (vintage, 1980), Parameters, 1974, 4, 40-51.

This personal opinion essay discusses the necessary skills of a senior officer. It argues that officers from lieutenant colonel through general need to know about the civilian society, its problems, and political policies. The author contends that an all-volunteer Army and increased government regulations have led to a greater interdependency between the Army and its parent society; thus a knowledge of the interface is a prerequisite of the senior

officer. The author also discusses the advantages and disadvantages of different managerial styles, suggesting that effectiveness depends on matching the appropriate managerial style to the situation.

- 3-05. Bradley, O. N., GEN. Leadership. Military Review, 1960, 46, 48-53.

General of the Army Omar Bradley describes the necessary functions and characteristics of senior leaders based on his own experiences in military and industrial organizations. The General argues that leadership functions and skills are the same in both sectors. According to General Bradley, leaders have two functions: planning (information collection and analysis, policy formulation, and decisionmaking) and execution (coordinating efforts and inspiring others to do the job). The latter is considered the more important of the two and can be accomplished by combining personal qualities (character, conviction, and outstanding physical and mental energy) with interpersonal skills (human understanding, consideration of others, and the ability to reward as well as punish) and managerial skills (the ability to identify, select, and develop a competent staff, a thorough understanding of and interest in all parts of the organization, and skills at soliciting inputs from others).

(This article has had a great influence on the Army's leadership doctrine of the past decade. General Bradley has presented it to students at both the U.S. Army Command and General Staff College (USACGSC) and the U.S. Army War College (USAWC), its contents form the basis of most leadership manuals written in the past 10 years, and it serves as a foreword to USAWC's series of pamphlets on "Leadership for the 1970s" (see 1-05, 2-40, 2-57). It is interesting to note that General Bradley (and the Army) emphasizes "execution" skills, while most writers in the industrial community stress "planning.")

- 3-06. Brunson, R. R. Perceptual skills in the corporate jungle. Personnel Journal, 1972, 51, 50-53.

Brunson, a management professor, suggests that the higher a manager rises in the corporation, the more unstructured and ill-defined the job becomes. To effectively cope with such a situation, executives must motivate employees toward goal accomplishment through the informal communication network. This requires three basic sets of skills: technical (a knowledge of one's specific specialty area); structural (abilities to plan, organize, direct, activate, lead, motivate, control, and communicate); and perceptual/cognitive skills. This latter set of skills is considered the most important by the author, and includes an understanding of the major organizational goals and values, the ability to distinguish significant from trivial information, and the ability to absorb, evaluate, and clearly transmit messages. (This article is basically an elaboration of an earlier "skill mix" theory (see 3-24), but with a clearer statement of the necessary conceptual skills. Interestingly, the author does not include this theory among his references.)

- 3-07. Costello, J. What it takes to be a chief executive. Nation's Business, 1977, 65, 6.

A chief executive describes the skills required for his position. These include technical know-how, aptitude for long-range planning, and the ability to carry on external relations with the many publics that are important to a company. Also, he should have integrity, be people-oriented, have a personality that instills confidence and respect, and possess natural leadership ability, intelligence, an open mind, flexibility, and self-confidence.

- 3-08. Davis, R. C. The Fundamentals of Top Management. New York: Harper, 1951.

This 800-page volume describes the author's philosophy of effective executive management, based on his personal experiences and the existing theoretical literature prior to 1950. The approach taken by the author is described as "scientific management," which he defines as "the application of the logic of effective thinking to the solution of business problems." The book provides a detailed description of what the author perceives to be the three major functions of the executive (creative planning, organizing, and controlling) and suggests how these functions should best be carried out by describing well over 100 principles of management.

- 3-09. Drucker, P. F. The Effective Executive. London: Heinemann, 1967.

A "self-training" book by a well-known consultant on what an effective executive should do. Conceptual skills are most important, according to Drucker, for the executive's major task is to structure the situation and eliminate obstacles so he can "think" (i.e., plan and decide). The effective executive is described as one who (1) is goal/results-oriented, (2) manages time well, (3) emphasizes his/her strengths, (4) is good at selecting and developing competent people, and (5) is an effective decisionmaker. This latter characteristic implies that the executive is able to identify the root problems, specify what decisions must be made, convert decision into action, obtain accurate feedback, and modify plans when necessary.

- 3-10. Fayol, H. General and Industrial Management. London: Pitman, 1949.

First published in 1916, this treatise by a French industrialist serves as a basis for most of the later functional theories in the field. It discusses four necessary functions of management (planning, organizing, command/supervising, coordination, and control/monitoring) and sets forth 14 principles/requirements of an effective organization. Fayol suggests that a well-run organization should have a clear organizational structure in terms of division of labor, authority, responsibility-assignment, and chain of command; an equitable and well-specified set of rules, standards, and penalties; employment stability; and a climate encouraging initiative, cohesiveness, and harmony. The author also emphasizes the need for management education to learn how these requirements should be implemented.

- 3-11. Fox, J. M. Executive Qualities. Reading, MA: Addison-Wesley, 1976.
Guided by personal experience, the author suggests that 12 "personal" and "mental" qualities (e.g., courage, integrity, nimble-mindedness, etc.) combine to form 6 "abilities" characteristic of an executive's role (judgment, communication ability, leadership, political astuteness, and foresight). (Unfortunately, neither the qualities nor abilities are clearly defined (e.g., "Leadership, as distinct from sales ability, is simply the ability to lead others" (p. 190).)
- 3-12. Gardner, N. D. Effective Executive Practices. Garden City, NJ: Doubleday, 1963.
This is a programmed text aimed at helping executives function more effectively. The book offers suggestions on effective use of time, delegation, planning, decisionmaking, and management controls.
- 3-13. Goble, F. G. Excellence in Leadership. New York: American Management Association, 1972.
The book describes the effective executive on the basis of quotes from successful executives and the author's personal experiences as a consultant. The effective executive is characterized as one who (1) is goal-directed, (2) develops clear plans for setting and achieving goals, (3) is a creative problem-solver who can adapt to change, and (4) does not simply conform, but (5) is willing to take risks in developing and implementing plans he believes are right.
- 3-14. Goetzinger, C. & Valentine, M. Problems in executive interpersonal communication. Personnel Administration, 1964, 27, 24-29.
An essay by two organizational consultants on persistent communication problems encountered in their work with executives. Many executives, they contend, fail to recognize that a communication system is not an inanimate structure, but a series of interpersonal relationships composed of human beings who (1) can process only a limited amount of information, (2) do not accurately receive messages they perceive as threatening or cannot understand, and (3) hesitate to send accurate, innovative information if they feel honest feedback is discouraged, will be used against them, or will not affect planning and decisionmaking. The authors suggest executives must create a climate of openness and trust that discourages the tendency to filter out unpopular or negative ideas and encourages honest, innovative upward communication.
- 3-15. Heffner, R. W. What makes a good executive? Advanced Management, 1954, 19(12), 21-23. (Also in P. D. Grub & N. M. Loeser (Eds.), Executive Leadership: The Art of Successfully Managing Resources. Wayne, PA: MDI Publications, 1959, pp. 104-108.)
The author argues that one must go beyond a general description of the primary executive functions (planning, organizing,

directing, coordinating, and controlling) to specify the skills/ characteristics necessary to perform these functions. Six sets of trainable skills and four characteristics needed to learn these skills are discussed. The skills include: (1) an ability to recognize the optimal time for introducing policies; (2) communication skills; (3) the ability to discover critical elements of a situation and arrive at novel solutions; (4) the ability to reason deductively and inductively; (5) skills at involving subordinates in the decision-making process; and (6) an ability to persuade and motivate. The four personal characteristics are intelligence, stability (e.g., inner poise to create consistency of action), empathy, and social sensitivity (an understanding of interpersonal and group processes).

- 3-16. Held, W. G. Executive skills: The repertoire needs enlarging. Columbia Journal of World Business, 1967, 2(2), 81-87. (Also in P. D. Grub & N. M. Loeser (Eds.), Executive Leadership: The Art of Successfully Managing Resources. Wayne, PA: MDI Publications, 1969. Pp. 70-79.)

According to the author, executives must increase their understanding of the socio-economic issues in the society at large and the organization's role in society, because of the growing interdependency between industry and government. He suggests that this element should be incorporated into management theories and education programs, and calls for systematic research to define the necessary skills.

- 3-17. Henry, W. E. The business executive: The psychodynamics of a social role. American Journal of Sociology, 1949, 54, 286-291.

This article lists and describes characteristics of chief executive officers. The author contends that the successful executive represents a crystallization of many of the attitudes and values of American society.

- 3-18. Hunt, B. Managers of change: Why are they in demand? Advanced Management Journal, 1980, 45(1), 40-44.

The author offers his personal opinions about the skills required of today's executive. He suggests the effective executive is one with multidimensional skills who can adapt to a rapidly changing environment. Among the required skills are farsightedness, an understanding of human behavior, the ability to motivate others, and the capacity to relate business problems to the world at large.

- 3-19. Jaques, E. A General Theory of Bureaucracy. New York: Halsted, 1976.

The author presents a theory of organizational structure along with some illustrative data from his extensive work with a large British manufacturing firm. The theory views organizations as being composed of discrete (discontinuous) hierarchical levels, distinguished by the time frame with which the manager must be concerned

and the level of abstractness characterizing the work. The theory suggests that senior level managers must be capable of long-range planning (i.e., time spans beyond 2 years) and abstract thinking. Not everyone is capable of becoming an effective senior leader, the author contends, for individuals differ in their capacity to perform these cognitive functions.

- 3-20. Jennings, E. E. The Executive: Autocrat, Bureaucrat, Democrat. New York: Harper & Row, 1962.

The author believes that an effective chief executive is one who has the flexibility and self-confidence to adapt to a constantly changing environment filled with uncertainty. He discusses the three basic leadership styles (Autocrat, Bureaucrat, and Democrat) and introduces a fourth, the "Neurocrat," whom he feels typifies many executives of the 1960s: an anxiety-ridden, insecure, inflexible individual with high needs for power, order, and achievement. He suggests that none of the four types can adapt optimally to the executive's environment. He proposes a style which blends features of the basic three types.

- 3-21. Johnson, F. R. Specialists vs. generalists: Who runs the company? Management Review, 1980, 69(1), 43-45.

A personal opinion essay arguing that chief executive officers should be generalists who can speak knowledgeably on many phases of business, since corporations go through cycles requiring different management skills.

- 3-22. Jones, E. E. Industrial Leadership and Executive Ability: Lessons To Be Drawn from the History of War, Science and Statecraft. Easton, PA: Hive Publishing Company, 1974.

Originally written in 1914, the author believes the successful leader has personal characteristics traditionally associated with generals, scientists, and diplomats. The book develops primary principles of administration from histories and biographies of famous people in these areas.

- 3-23. Katz, D. & Kahn, R. L. The Social Psychology of Organizations (2nd ed.). New York: Wiley, 1978.

In Chapter 16 ("Leadership") of this well-known work on the organization as an open system, Katz and Kahn present a leadership theory emphasizing the importance of influence/power bases not decreed by the organization. The authors distinguish three leadership patterns: Origination (creation, change, and elimination of structure), Interpolation (supplementing and piecing out structure), and Administration (using structure that already exists), corresponding approximately to the top, middle, and bottom levels of an organization, respectively. For each of these levels, Katz and Kahn have suggested a cognitive and an affective requirement. At the Origination level, the one most closely associated with top

management, the cognitive requirement is a "systemic perspective." This involves an ability to change or create new structures and an awareness of the organization's relationship with its environment and interrelation among organizational subsystems. The affective component, which is called "charisma," is an aura surrounding a leader that separates him from the general membership. It arises from the leader's ability to satisfy the dependency needs of his followers through dramatic leadership acts.

- 3-24. Katz, R. L. Skills of an effective administrator. Harvard Business Review, 1974, 52, 80-108.

In a 1955 issue of Harvard Business Review (Vol. 33, pp. 33-41), Katz postulated that all leaders require three basic types of skills, technical skills (an understanding of and proficiency in a specific kind of activity), human skills (understanding and motivating individuals in groups), and conceptual skills (coordinating and integrating all the activities and interests of the organization toward a common objective), with their relative importance varying according to managerial level. As one ascends the organization hierarchy, technical skills become relatively less important, the need for conceptual skills increases rapidly, while human skills remain equally important at all levels. He suggested that these different "skill mixes" should be taken into account in selection, training, and development.

The current article presents the original theory along with a retrospective commentary by its originator. In general, Katz stands by his original skill mix formulation, but modifies his definitions of the human and conceptual skills and expands upon the chief executive's role. Human skills are divided into two (mutually incompatible) components: Leadership within the manager's own unit and intergroup relationship skills, the latter being more important at senior management level. Katz now sees conceptual skills as an innate, largely untrainable ability to think in terms of uncertainties and probabilities. The successful chief executive must be an efficient operator and an effective strategist, according to Katz, whose necessary skill mix varies as the organizational requirements change. The executive must depend upon conceptual and technical skills when the organization is in difficulty, conceptual and intergroup skills when developing and expanding, and human skills when maintaining the organization on its present course.

- 3-25. Makrrianes, J. K., Jr. External relations and the chief executive. Public Relations Journal, 1980, 36(3), 34-35.

In this personal opinion essay by an executive search firm director, Makrrianes contends that the interdependence between organizations and their external environments has increased over the past 10 years. To deal with this trend, the chief executive officer must have a thorough understanding of and the ability to communicate with external agencies affecting their organizations.

- 3-26. McGregor, D. The Professional Manager. New York: McGraw-Hill, 1967.

This book contains a section on role differences between middle and upper management. The author suggests that while middle managers deal with concrete, day-to-day problems, the executives face a much broader and more complex set of issues. Among the executive roles discussed are: planning, coordinating, establishing broad policies, interfacing the internal-external environment, assessing subordinate behavior, analyzing the consequences of inadequate performance, and evaluating accomplishments of the organization as a whole. The author also points out that managerial roles are different from position descriptions because management behavior is contingent on the personal characteristics of the office holder as well as on a constantly changing environment.

- 3-27. Mintzberg, H. The manager's job: Folklore and fact. Harvard Business Review, 1975.

In this article, Mintzberg contends that research shows managers are not the systematic, reflective planners that the theories postulate. Rather the job pressures drive the manager to be "action" (not "thinking") oriented, responding to immediate needs rather than to long-range plans. Managers are described as individuals who are superficial in their actions, overload themselves with work, encourage interruptions, respond quickly to stimuli, seek the tangible and avoid the abstract, and make decisions in small increments. Mintzberg also reviews his category system of managerial roles presented in an earlier book (see 1-18) and reiterates the need for skills training.

- 3-28. Mitchell, W. N. The Business Executive in a Changing World. New York: American Management Association, 1965.

This book presents opinions based on the author's personal experiences as a consultant on what top level managers must know to be successful. The author believes the major problem of management is "leadership" (i.e., how to organize available human effort). Effective leadership, in turn, depends upon a thorough understanding of the following: (1) the nature and limits of authority, (2) executive functions (direction, representation, and evaluation), (3) how to motivate people, (4) how to organize one's time and effort, (5) how to establish order in operations, and (6) how to deal with an ever-changing environment.

- 3-29. Munson, R. J., Saxberg, B. D., & Sutermeister, R. A. The modern manager: What makes him RUN? Business Horizons, 1966, 923-934. (Also in P. D. Grub & N. M. Loeser (Eds.), Executive Leadership: The Art of Successfully Managing Resources. Wayne, PA: MDI Publications, 1969. Pp. 51-62.)

These authors suggest that personal motivation/goals interrelate and sometimes conflict with organizational goals and therefore both must be taken into consideration to understand managerial behavior at all levels. They believe the most important motivators

are: need for achievement, power motives, personality characteristics, value systems, money, power, status, prestige, competence, affiliation, and service to others.

- 3-30. Newman, A. S., MG. What are generals made of? Army, 1969, 19(7), 16-21.

This essay on the characteristics of effective general officers describes the early military careers of nine famous generals. Based on these descriptions he suggests the following "intangible qualities" that must be developed early in an officer's career: a professional attitude, self-confidence, a sense of perspective, and aggressiveness modified by a sense of humor, compassion for others, and a toleration of human error.

- 3-31. Newman, A. S., MG. What are generals made of?--II, Army, 1969, 19(8), 39-42.

This is the second of a two-part essay on characteristics of effective general officers (see 3-30). It describes the "intangible qualities" of nine famous generals after they had reached the general officer level. These qualities include human understanding; time management capabilities; an ability to meet challenges successfully; a bold, positive, driving character--and a little bit of luck.

- 3-32. Peters, T. J. Leadership: Sad facts and silver linings. Harvard Business Review, 1979, 57(6), 164-172.

The author contends that the hectic nature of the job does not allow executives to be the rational, orderly, systematic decision-makers that the theorists portray. Their time is fragmented; they rarely receive all the options necessary for a rational decision, and they must be content with long time delays between making the decision and its implementation. This is not necessarily disastrous, according to the author, for the executive's chief function is not to be a decision-maker but to serve as a formulator of values, and to persuade others that these values should be implemented. The author describes how to accomplish these functions within the confines of the executive's job.

- 3-33. Rodman, I. The Executive Jungle. Los Angeles: Nash, 1972.

This practical guide to success is aimed at executives who want to "hack it," as the author puts it. It describes the various ineffective personality types Rodman has encountered as a consultant to point out traits that should be avoided.

- 3-34. Scanlon, B. K. Managerial leadership in perspective: Getting back to basics. Personnel Journal, 1979, 58, 168-171, 183-184.

This personal opinion essay argues that too much time has been spent on theories and research into management styles and too little on leadership skills specifically associated with performance

criteria. This type of leadership depends upon establishing performance standards, delegating authority, and coaching (performance appraisal). The author discusses what an effective leader should do in each area.

- 3-35. Tannenbaum, A. S. & Georgopolos, B. S. The distribution of control in formal organizations. In A. S. Tannenbaum (Ed.), Control in Organizations. New York: McGraw-Hill, 1968. Pp. 45-54.

The authors present an analytic framework and some illustrative data on the distribution of control in formal organizations and indicate some of the issues involved as well as some of the directions for future research. They suggest that the direction of control is upward as well as downward and to understand the process one must consider the degree to which an individual controls (active control) and is controlled by others (passive control) as well as who exercises the control (sources of control) and over whom the control is exercised (orientation of control). They suggest a relationship between these four elements will differ by organizational level, function, and situational factors. They note, for example, that the military control process will be different during peace and wartime.

- 3-36. Taylor, M. D., GEN. A do-it-yourself professional code for the military. Parameters, 1980, 4, 10-15.

GEN Taylor proposes that the ideal officer is one who can successfully and efficiently carry out all assigned tasks. Personal characteristics needed are mental and physical stamina, a sense of justice, patriotism, loyalty to Army and country, strength of will/conviction, human understanding (consideration), a consultative style, and the ability to inspire. The author notes that these are especially relevant at senior command levels.

- 3-37. Urwick, L. F. The Elements of Administration. New York: Harper, 1943.

Based on his top management experience as managing director of a British consulting firm, Urwick elaborates upon Fayol's suggested functions of management (see ref. no. 29). He accepts Fayol's "organizing," "command," and "control" functions but separates "planning" into two separate functions: "plan development" and "forecasting." In addition, he emphasizes the role of "investigation" (i.e., research and development) as a major function of a manager. Along with a discussion of the functions, Urwick presents 29 major principles and a host of subprinciples regarding how an effective organization should be run.

- 3-38. U.S. Department of the Army. Promotion of Officers on Active Duty. Army Regulation No. 624-100. Washington, May 1979.

This Army regulation stipulates the characteristics necessary for promotion to general officer rank. Emphasis is placed on the ability to initiate and shape policies (i.e., conceptualize issues, chart strategy, and formulate plans) rather than to merely organize

already existing solutions. Other requirements include leadership and management skills, general staff experience, selfless dedication to serve, an ability to represent the Army and communicate articulately with those outside the military, exhibited imagination in challenging personnel, and past evidence of concern for his/her subordinates and their problems. Technical specialty is not an important consideration.

- 3-39. U.S. Directorate for Armed Forces Information and Education. The Armed Forces Officer. Department of Defense Pamphlet 1-20. Washington, 1977.

This manual is a basic source for commissioned officers in all the military services on expected conduct and behavior. While it is intended primarily for junior officers, the authors indicate that the material "should be of value to officers with longer experience," implying that the basic skills and values are similar across the rank structure. The material presented in Chapter 7 ("Leader and Leadership") and Chapter 8 ("Mainsprings of Leadership") are especially relevant. Chapter 7 describes the qualities that exceptional past military leaders had to highlight the point that there is no one leadership type. The only characteristics all had in common were (1) skills in organizing men into a coherent team to reach a goal; (2) courage and willingness to take risks; (3) physical fitness; and (4) "a strong belief in the U.S. and the goodness of a free society." Chapter 8 describes the necessary qualities of today's effective officer (e.g., an inherent ability to control and direct, self-confidence based on expert knowledge, initiative, loyalty, pride, a sense of responsibility, and a dedication to task accomplishment). The chapter emphasizes that leadership is not innate, but can be trained.

- 3-40. "Wanted: A manager to fit each strategy." Business Week, 25 February 1980, 166, 168, 173.

This Business Week article takes a contingency approach to leadership by emphasizing the need to match an executive's personality and talent with the type of task to be accomplished. It describes four industries that were successfully implementing this approach.

- 3-41. Wrapp, H. E. Good managers don't make policy decisions. Harvard Business Review, 1967, 45, 94-100.

The author personally believes that the portrait of a general manager as a rational decision-maker is a myth. He describes the executive as an opportunist who muddles through problems (although with a purpose), concerns himself with many day-to-day operating matters, and does not limit himself to the "big picture." He sees the executive's function as one of giving the organization a sense of direction and seeing that individuals work toward that goal. Much of the article deals with what an executive should do to perform this function effectively.

Additions

- 3-42. Channon, J. B., LTC. Preparing the officer corps for the 1990's. Military Review, 1978, 58(5), 10-23.

With the help of futuristic projections from U.S., Soviet, and German military and nonmilitary sources, the author attempts to (1) forecast the environment senior officers will face in the 1990's, (2) describe the necessary skills for such an environment, and (3) suggest appropriate training formats. The military environment, he postulates, will be highly technical and complex, characterized by a greater interface with the nonmilitary sector while maintaining its current peace-keeping mission. In this environment, the effective senior leader is described as a "social engineer," sensitive to the human capabilities of those who work for him/her and proficient with the advanced weapons systems of the day. The author subsumes the necessary skills under four categories: Combat Skills, Management Skills, Technical Depth and Organizational Effectiveness (i.e., leadership, interpersonal and communication/language skills). He predicts that Combat and Management Skills will remain the fundamental building blocks, while Technical Depth and Organizational Effectiveness will become even more important. In addition, new special skills may be required in the resource management, information sciences, innovations, combat development, and systems design fields, and he believes all officers must acquire the ability to adapt to constructive change. According to the author, "thinking"/perceptual skills are basic to the development of all other competencies. He argues that the military schools should concentrate on the development of these higher-order skills through simulations, leaving the information teaching to continuing education programs.

- 3-43. Masland, J. W. and Radway, L. I. Soldiers and Scholars: Military Education and National Policy. Princeton, NJ: Princeton University Press, 1959.

As part of this classic volume on professional military education, the authors describe three "sets of qualifications" required by military executives: Professional Military Qualifications, General Executive Qualifications, and Military Executive Qualifications. "Professional Military Qualifications" include technical knowledge about military roles, functions, and organizations; knowledge of the organization's interests and policies; and knowledge of subordinate needs and problems. "General Executive Qualifications" describe the traditional leadership and management skills. Among these are the ability to inspire subordinates, work harmoniously with others, communicate effectively, evaluate information and people, conduct affairs efficiently, overcome parochial attitudes, adapt to changing environments, and grasp complicated problem-solving situations, including the capacity to identify problems and isolate relevant variables and relationships. "Military Executive Qualifications" include such attributes as professionalism, dedication, patriotism, self-discipline, a broad knowledge of military and nonmilitary affairs, and the ability to interface the two environments.

DISTRIBUTION

1 US ARMY WESTERN COMMAND ATTN: APPE
 1 DEPARTMENT OF THE NAVY TRAINING ANALYSIS AND EVALUATION GROUP
 1 HQDA ATTN: DAAG-ED
 1 US PACIFIC FLEET HUMAN RESOURCE MANAGEMENT DETACHMENT
 1 HQ, ICATA ATTN: ATCAT-UP-W
 1 HQ, USMEPCOM ATTN: MEPCT
 2 HQDA RESEARCH AND STUDIES OFC
 1 MILITARY OCCUPATIONAL DEVELOPMENT DIV DAPC-MSP-U, RM 852C HOFFMAN BLDG 1
 1 HQDA OFFICE OF THE CHIEF OF CHAPLAINS
 4 OASD (MHA AND L)
 1 HQDA ATTN: DAMU-RGH
 1 HQDA ODCSPER
 1 HQDA ATTN: DAMI-ISI
 1 USA AVIATION SYSTEMS COMD ATTN: UKSAV-ZOR
 1 EQUAL OPPORTUNITY BRANCH ATTN: AFZT-PA-HR
 1 USA MRRADCOM ATTN: ATFE-LU-AC
 1 HEADQUARTERS US MARINE CORPS ATTN: CODE MMT
 1 HEADQUARTERS, US MARINE CORPS ATTN: CODE MPI-20
 2 US ARMY EUROPE AND SEVENTH ARMY
 1 1ST INFANTRY DIVISION AND FT. RILEY ATTN: AFZN-UP-T
 1 CHIEF, ATTITUDE + OPINION SURVEY DIVISION ATTN: ATZI-NCR-MA, HOFFMAN BLDG II
 1 USA INTELLIGENCE AND SECURITY COMMAND ATTN: IAOPS-ING-T
 2 HQ TRADOC TECHNICAL LIBRARY
 1 MILITARY OCCUPATIONAL DEVELOPMENT DIRECTORATE ATTN: ATZI-NCR-MS-M, RM 3N33 HOFFMAN BLDG II
 1 DATA ANALYSIS DIVISION ATTN: ATZI-NCR-MD, HOFFMAN BLDG II
 1 USA MILPERCEN ATTN: DAPC-POU-T
 1 USA ORDNANCE + CHEMICAL CENTER AND SCHOOL ATTN: ATSL-DTC-P
 1 HQDA ARMY FORCE MODERNIZATION COORDINATION OFFICE
 1 HQDA ATTN: DASG-PTB
 1 123D USARCOM RESERVE CENTER
 1 US ARMY SOLDIER SUPPORT CENTER /
 1 USA FORCES COMMAND AFPR - DEPT CHIEF OF STAFF FOR PERSONNEL
 1 DIRECTORATE OF TRAINING ATTN: ATZQ-T
 1 DIRECTORATE OF COMBAT DEVELOPMENTS ATTN: ATZQ-D
 1 HQDA COM MARINE CORPS LIAISON OFC
 1 DEPARTMENT OF THE ARMY US ARMY INTELLIGENCE + SECURITY COMMAND
 1 ANNISTON ARMY DEPOT ORGANIZATIONAL EFFECTIVENESS
 1 US ARMY CECOM ATTN: DRSEL-ATUD
 1 USA FORCES COMMAND
 1 PM TRADE /
 1 US MILITARY DISTRICT OF WASHINGTON OFC OF EQUAL OPPORTUNITY
 1 NAVAL CIVILIAN PERSONNEL COMD SOUTHERN FLD DIV
 22 ARI LIAISON OFFICE
 1 7TH ARMY TRAINING COMMAND
 1 HQDA, OCS STUDY OFFICE
 1 DEPARTMENT OF THE NAVY HUMAN RESOURCE MANAGEMENT DIVISION (OP-15)
 1 DEPARTMENT OF THE NAVY HUMAN RESOURCE MGT AND PERSONAL AFFAIRS DEPT
 1 DEPARTMENT OF THE NAVY HUMAN RESOURCE MGT AND PERSONAL AFFAIRS DEPT
 1 NAVAL MILITARY PERSONNEL COMMAND (N-62)
 1 NAVAL MILITARY PERSONNEL COMMAND (N-61)
 1 NAVAL MILITARY PERSONNEL COMMAND (N-4)
 1 HUMAN RESOURCE MANAGEMENT CENTER
 1 HUMAN RESOURCE MANAGEMENT CENTER
 1 U.S. NAVY TRAINING ANALYSIS EVALUATION GROUP
 1 USACUEC ATTN: ATEC-EX-E HUMAN FACTORS
 1 ATTN: SM-ALC/OPCR
 1 INTER-UNIV SEMINAR ON ARMED FORCES + SOC
 1 OASA (RDA) DEPUTY FOR SCIENCE AND TECHNOLOGY
 1 OFC OF NAVAL RESEARCH /
 1 AFHRL/LRT
 1 AFHRL/LRLG

1 AIR FORCE HUMAN RESOURCES LAB ATTN: AFHRL/TSR
 1 NAVY PERSONNEL R AND D CENTER /
 1 NAVY PERSONNEL R AND D CENTER DIRECTOR OF PROGRAMS
 1 NAVY PERSONNEL R AND D CENTER /
 2 OFC OF NAVAL RESEARCH PERSONNEL AND TRAINING RESEARCH PROGRAMS
 1 NAVAL PERSONNEL R + D CENTER /
 1 OFC OF NAVAL RSCH ORGANIZATIONAL EFFECTIVENESS PRO.
 1 MCFARLAN-GRAY + ASSOCIATES, INC. /
 1 NAVAL AEROSPACE MEDICAL RSCH LAB AIRBORNE RANGE RESEARCH
 1 DEPT. OF NATIONAL DEFENCE DEFENCE AND CIVIL INSTITUTE OF ENVIR MED
 1 NAVAL AEROSPACE MEDICAL RSCH LAB AEROSPACE PSYCHOLOGY DEPARTMENT
 1 USA IRADOC SYSTEMS ANALYSIS ACTIVITY ATTN: ATAA-TCA
 1 HEADQUARTERS, COAST GUARD CHIEF, PSYCHOLOGICAL RSCH BR
 1 USA ENGINEER TOPOGRAPHIC LABS ATTN: ETL-TD-S
 1 USA MOBILITY EQUIPMENT R AND D COMD ATTN: DRDME-TQ (SCHOOL)
 1 USA TRAINING BOARD ATTN: ATTG-ATB-TA
 1 USA MATERIEL SYSTEMS ANALYSIS ACTIVITY ATTN: BRXSY-C
 1 NAFEL HUMAN ENGINEERING BRANCH
 1 BATTELLE-COLUMBUS LABORATORIES TACTICAL TECHNICAL OFC
 1 USA ARCTIC TEST CEN ATTN: AMST-PL-TS
 1 USA COLD REGIONS TEST CEN ATTN: STECR-OP
 1 USA CONCEPTS ANALYSIS AGCY ATTN: CSCA-HQP
 1 HQ WHAIR DIV OF NEUROPSYCHIATRY
 1 USACAC ATTN: ATZL-CAC-IA
 1 USACACDA ATTN: ATZL-CAC-A
 1 USA ELECTRONIC WARFARE LAB CHIEF, INTELLIGENCE MATER DEVEL + SUPP OFF
 1 USA RSCH DEVEL + STANDARDIZA GP, U.K.
 1 NAVY PERSONNEL RSCH + DEVEL CENTER ATTN: (CODE 307)
 1 USA RESEARCH AND DEVELOPMENT LABS CHIEF, BEHAV SCIENCES DIV, FOOD SCI LAB
 1 USAARL LIBRARY
 1 HUMAN RESOURCES RSCH ORG (HUMRRU) /
 1 SEVILLE RESEARCH CORPORATION
 1 USA IRADOC SYSTEMS ANALYSIS ACTIVITY ATTN: ATAA-SL (TECH LIBRARY)
 1 UNIFORMED SERVICES UNIT OF THE HEALTH SCI DEPARTMENT OF PSYCHIATRY
 1 USA COMPUTER SYSTEMS COMMAND ATTN: COMMAND TECHNICAL LIBRARY H-9
 1 HUMAN RESOURCES RSCH ORG (HUMRRU)
 1 HUMRRU LIBRARY
 1 BATTELLE REPORTS LIBRARY
 1 RAND CORPORATION /
 1 RAND CORPORATION ATTN: LIBRARY D
 1 NAFEL LIBRARY, ANA-64
 1 GRONINGER LIBRARY ATTN: ATZF-RS-L BLDG 1313
 1 CENTER FOR NAVAL ANALYSIS
 1 NAVAL HEALTH RSCH CEN LIBRARY
 1 NAVAL PERSONNEL R AND D CEN LIBRARY ATTN: CODE P106
 1 HQ, FT. HUACHUCA ATTN: TECH REF DIV
 1 USA ACADEMY OF HEALTH SCIENCES STIMSON LIBRARY (DOCUMENTS)
 1 SCHOOL OF SYSTEMS AND LOGISTICS /
 1 ERIC PROCESSING AND REFERENCE FAC ACQUISITIONS LIBRARIAN
 1 DEPARTMENT OF THE NAVY TRAINING ANALYSIS AND EVALUATION GP
 1 NATIONAL CENTER FOR HEALTH STATISTICS /
 1 USMA DEPT OF BEHAVIORAL SCI AND LEADERSHIP
 1 OLD DOMINION UNIVERSITY PERFORMANCE ASSESSMENT LABORATORY
 1 USA COMMAND AND GENERAL STAFF COLLEGE ATTN: LIBRARY
 1 USA TRANSPORTATION SCHOOL USA TRANSP TECH INFO AND RSCH CEN
 1 USA ADMINCEN TECHNICAL RESEARCH BRANCH LIBRARY
 1 USA FIELD ARTY BU /
 1 NAT CLEARINGHOUSE FOR MENTAL HEALTH INFO PARKLAWN BLDG
 1 U OF TEXAS CEN FOR COMMUNICATION RSCH
 1 INSTITUTE FOR DEFENSE ANALYSES
 1 USA TRAINING SUPPORT CENTER ATTN: ATIC-DST-PA
 1 AFHRL TECHNOLOGY OFC (H)

1 PURDUE UNIV DEPT OF PSYCHOLOGICAL SCIENCES
 1 USA MOBILITY EQUIPMENT R AND D COMMAND ATTN: DRUME-ZG
 1 HQ, USA MDW ATTN: ANPE-0E
 1 DA US ARMY RETRAINING BDE RESEARCH + EVALUATION DIVISION
 1 DANVILLE RESEARCH ASSOCIATES, INC.
 1 USA AEROMEDICAL RESEARCH LAB SCIENTIFIC INFORMATION CENTER
 1 HUMAN RESOURCE MANAGEMENT CEN, SAN DIEGO
 1 USAFA DEPT OF BEH SCI + LEADERSHIP
 1 US MILITARY ACADEMY DEPT. OF HISTORY, BLDG 601
 1 USA INTELLIGENCE CEN AND SCH ATTN: SCHOOL LIBRARY
 1 MARINE CORPS INSTITUTE
 1 US COAST GUARD TNG CEN ATTN: EDUCATIONAL SVCS OFFICER
 1 USAAVNC AND FT. RUCKER ATTN: ATZQ-ES
 1 USA AIR DEFENSE SCHOOL ATTN: ATSA-UT
 1 USAAVNC ATTN: ATZQ-D
 1 US MILITARY ACADEMY DIRECTOR OF INSTITUTIONAL RSCH
 1 USA AIR DEFENSE SCHOOL ATTN: ATSA-CD-MS
 1 USAADS-LIBRARY-DOCUMENTS
 1 USA AIR DEFENSE BOARD ATTN: FILES REPOSITORY
 1 USA SERGEANTS MAJOR ACADEMY ATTN: LEARNING RESOURCES CENTER
 1 USA INTELLIGENCE CEN AND SCH ATTN: ATSI-DT-SFL
 1 USA ORDNANCE CEN AND SCH ATTN: ATSL-TD-TAC
 1 USA ARMOR SCHOOL ATTN: ATZK-TD
 1 NAVAL POSTGRADUATE SCH ATTN: DUDLEY KNOX LIBRARY (CODE 1424)
 1 USA TRANSPORTATION SCHOOL DEPUTY ASST. COMMANDANT EDUCA. TECHNOLOGY
 1 USA SIGNAL SCHOOL AND FT. GORDON ATTN: ATZH-ET
 1 USA MILITARY POLICE SCHOOL ATTN: LIBRARY
 1 USA ARMOR CENTER + FT. KNOX OFFICE OF ARMOR FORCE MGT + STANDARDIZATION
 1 USA SIGNAL SCHOOL + FT. GORDON EDUCATIONAL TECHNOLOGY DIVISION
 1 HQ AIC/XPTD TRAINING SYSTEMS DEVELOPMENT
 1 USA INSTITUTE FOR MILITARY ASSISTANCE ATTN: ATSU-TD-TA
 1 US ARMY ARMOR CENTER ATTN: ATZK-TD-PMO
 1 USA QUARTERMASTER SCHOOL DIRECTORATE OF TRAINING DEVELOPMENTS
 1 US COAST GUARD ACADEMY /
 1 USA TRANSPORTATION SCHOOL DIRECTORATE OF TRAINING + DOCTRINE
 1 USA INFANTRY SCHOOL LIBRARY /
 1 USA INFANTRY SCHOOL ATTN: ATSH-I-V
 1 US ARMY INFANTRY SCHOOL ATTN: ATSH-CU
 1 USA INFANTRY SCHOOL ATTN: ATSH-DOT-LRD
 1 USA INFANTRY SCHOOL ATTN: ATSH-EV
 1 USA MP + CHEM SCH/TNG CEN + FT. MCCLELLAN ATTN: ATZN-PTS
 1 USA MP + CHEM SCH/TNG CEN + FT. MCCLELLAN DIR. COMBAT DEVELOPMENT
 1 USA MP + CHEM SCH/TNG CEN + FT. MCCLELLAN DIR. TRAINING DEVELOPMENT
 1 USA MP + CHEM SCH/TNG CEN + FT. MCCLELLAN ATTN: ATZN-MP-ACE
 1 USA INSTITUTE OF ADMINISTRATION ATTN: RESIDENT TRAINING MANAGEMENT
 1 USA FIELD ARTILLERY SCHOOL MORRIS SWETT LIBRARY
 1 USA INSTITUTE OF ADMINISTRATION ACADEMIC LIBRARY
 1 USA WAR COLLEGE ATTN: LIBRARY
 1 USA ENGINEER SCHOOL LIBRARY AND LEARNING RESOURCES CENTER
 1 USA ARMOR SCHOOL (USARMS) ATTN: LIBRARY
 1 US COAST GUARD ACADEMY LIBRARY
 1 USA TRANSPORTATION SCHOOL TRANSPORTATION SCHOOL LIBRARY
 1 ORGANIZATIONAL EFFECTIVENESS CEN + SCH ATTN: LIBRARIAN
 1 US ARMY INTELLIGENCE CENTER + SCHOOL ATTN: ATSI-TP
 1 US ARMY INTELLIGENCE CENTER + SCHOOL ATTN: ATSI-TD-PM
 1 US ARMY INTELLIGENCE CENTER + SCHOOL ATTN: ATSI-ES
 1 DEPARTMENT OF THE AIR FORCE AIR UNIVERSITY LIBRARY (ATC)
 1 USA CHAPLAIN CENTER + SCHOOL ATTN: ATSC-TD-OD
 1 USA CHAPLAIN CENTER + SCHOOL ATTN: ATSC-TD-ED
 1 USA CHAPLAIN CENTER + SCHOOL ATTN: ATSC-TD-SF
 1 USA CHAPLAIN CENTER + SCHOOL ATTN: ATSC-DOS-LLC
 1 DEPARTMENT OF THE NAVY HUMAN RESOURCE MANAGEMENT SCHOOL

1 NAVAL POST GRADUATE SCHOOL
 1 HQ TRADOC TRAINING DEVELOPMENT INSTITUTE
 2 BRITISH EMBASSY BRITISH DEFENCE STAFF
 2 CANADIAN JOINT STAFF
 1 CDLS (W) LIBRARY
 1 FRENCH ARMY ATTACHE
 1 AUSTRIAN EMBASSY DEFENSE, MILITARY AND AIR ATTACHE
 3 CANADIAN DEFENCE LIAISON STAFF ATTN: COUNSELLOR, DEFENCE R AND D
 1 ROYAL NETHERLANDS EMBASSY MILITARY ATTACHE
 1 CANADIAN FORCES BASE CORNWALLIS ATTN: PERSONNEL SELECTION
 2 CANADIAN FORCES PERSONNEL APPL RSCH UNIT
 1 ARMY PERSONNEL RESEARCH ESTABLISHMENT
 6 LIBRARY OF CONGRESS EXCHANGE AND GIFT DIV
 1 DEFENSE TECHNICAL INFORMATION CEN ATTN: DTIC-DDA-2
 140 LIBRARY OF CONGRESS UNIT DOCUMENTS EXPEDITING PROJECT
 1 US GOVERNMENT PRINTING OFC LIBRARY, PUBLIC DOCUMENTS DEPARTMENT
 1 US GOVERNMENT PRINTING OFC LIBRARY AND STATUTORY, LIB DIV (SLL)
 1 THE ARMY LIBRARY ATTN: ARMY STUDIES SEC
 3 / /
 1 / /

NUMBER OF ADDRESSEES 205

TOTAL NUMBER OF COPIES 384