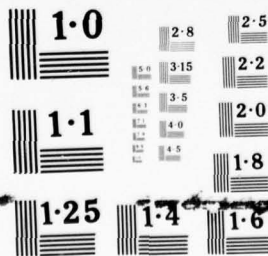




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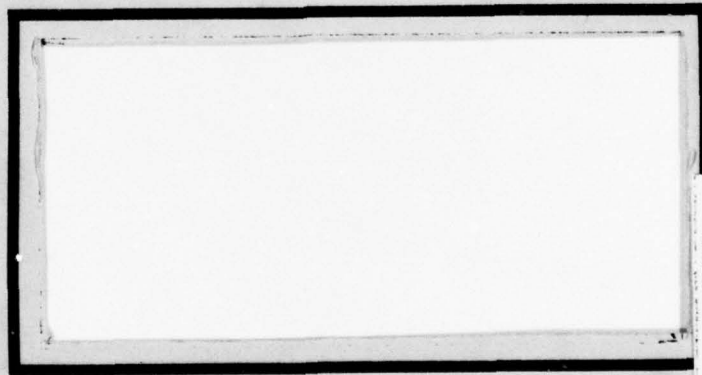
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ARMY PROJECT MANAGEMENT--  
A CAREER FIELD?  
STUDY REPORT  
PMC 73-2

Jerry Harold Huff  
LTC ARMOR USA

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  Currently, project management is not considered a career field under the OPMS concept. However, the positions do exist, and personnel are designated as project managers. This study addresses the question of career progressions of officers in the field as compared to rank equivalent commanders. It also proposes a possible career progression for the development of experienced project managers. The study concludes that currently there are no true "command equivalent" positions in project management for the lieutenant colonel. The recommendations are that a career field should be established																										

and credible command equivalent positions should be recognized at the lieutenant colonel level.

STUDY PROBLEM/QUESTION: To conduct a survey of senior Army officers to determine their attitudes and opinions towards project management; i.e., promotions, and career progressions of personnel in the field; also if a career field should exist in the Army.

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ARMY PROJECT MANAGEMENT--  
A CAREER FIELD?

An Executive Summary  
of a  
Study Report  
by

Jerry Harold Huff  
LTC ARMOR USA

November 1973

Defense Systems Management School  
Program Management Course  
Class 73-2  
Fort Belvoir, Virginia 22060

## EXECUTIVE SUMMARY

This study addressed Army Project Management and how it is perceived as a career field by senior officers. It is an analysis of the current attitudes and feelings of the "corporate mind" of the U.S. Army.

The study and analysis are based on data which is derived from a questionnaire sent to fifty-eight senior Army officers, to include general officer level. The response rate was very high; fifty-one (88%) of the questionnaires were returned.

Eight major research questions made up the total study effort. The overall topic addressed was "Army Project Management--A Career Field?" The research questions are listed below:

1. Should project managers be selected from a specific group of officers, and if so, what group?
2. Should a project management career field be established within the Army?
3. How does project management experience compare in responsibility to other Army assignments?
4. How does a lieutenant colonel project manager compare to battalion commanders for promotions and selection for senior service colleges?
5. What career background and experience is desired for general officers in the Army Materiel Command?
6. If a project management career field is established what should be the structure of officer assignments?
7. If you were responsible for selecting a new project manager to replace an unsuccessful project manager and

correct deficiencies in the overall program, what type officer would you select?

8. What type experience is most important for a project manager?

Several sub-conclusions were derived from this study. First, the respondents did not feel that project managers should be selected from any specific group of officers; second, the respondents did not feel that a career field in project management should be established; third, the respondents felt that the responsibilities of the colonel project manager equal, and sometimes exceed, the responsibilities of an equal rank command. However, the lieutenant colonel in project management did not fare so well.

The respondents indicated that there are no lieutenant colonel positions in project management which are considered equivalent to command. This is the key finding of the study.

Fourth, the respondents indicated a preference for the "problem solver and expediter" over the experienced project manager for the correction of deficiencies in a project which is in trouble.

The major finding of the study is that the "corporate mind" of the U.S. Army is not currently in favor of a career field which would develop experienced project managers. The current feeling is that normal command experience is more important to the project manager than previous experience in project management.

The recommendations of the study are, that actions be taken to accomplish two things:

(1) First, a career field in project management should be established.

(2) Second, credible command equivalent lieutenant colonel positions must be established within the project management area to allow a normal career progression to the position of "project manager" within the field.

The study views the major implementing action which is required at this time as one of education; there is a definite need to educate the Army on the very extensive and heavy responsibilities and the challenges which are placed on the project manager and his key subordinates.

ARMY PROJECT MANAGEMENT---  
A CAREER FIELD?

STUDY REPORT

Presented to the Faculty  
of the  
Defense Systems Management School  
in Partial Fulfillment of the  
Program Management Course  
Class 73-2

by  
Jerry Harold Huff  
LTC ARMOR USA

November 1973

## ACKNOWLEDGEMENTS

No study of this magnitude can be undertaken alone. Although I accept full responsibility for the analysis and conclusions stated here, it represents the contributions of many. Obviously, those senior officers who responded to my questionnaires provided the raw data that was so necessary. Their candid and frank responses are greatly appreciated. George Giacompe, my faculty advisor, provided a very necessary sounding board and many critical comments. Lee Jackson supplied statistics texts and constructive comments in that new field of study. Garth Payne was a ready source of the technical service corps point of view. Many other faculty members provided comments on my draft questionnaire. To them all I say thank you. My classmates gave much of their time in "coffee break" discussions of the points provided here; their support was greatly welcomed. And finally, I owe my biggest expression of gratitude to my wife Barbara; she listened to many arguments and exchanged many ideas during the writing of this study. She was my most helpful critic.

Falls Church, Virginia  
21 November 1973

JHH

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ARMY PROJECT MANAGEMENT--  
A CAREER FIELD? \*

CHAPTER I

INTRODUCTION

"Program managers must be given more recognition opportunity for career advancement in all the services, and good managers must be rewarded just as good operational people are rewarded".

Deputy Secretary of Defense  
David Packard

Today, at a time when weapon system complexity and cost are increasing, and defense budgets are decreasing, the need for experienced, competent project managers has become greater than at any other time in the history of our country. This need was recognized by the Department of Defense with publication of DoD Directive 5000.1 on 13 July 1971. This directive said in part:

"The assignment and tenure of program managers shall be a matter of concern to DoD Component Heads and shall reflect career incentives designed to attract, retain and reward competent personnel." (1:2)

---

\* ABSTAINER

This study represents the views, conclusions and recommendations of the author and does not necessarily reflect the official opinion of the Defense Systems Management School nor the Department of Defense.

Obviously, this type of support from the highest levels of the Department of Defense is encouraging, however, since I am a member of the United States Army, I decided to look further into the area of program management as it pertains to the Army. The formalization of my interest, and likewise the topic of my research paper became "Army Project Management--A Career Field?". \*

Although the title of my paper is the basic question which I decided to answer with my research, the question really can be broken down into two parts. First, we can ask the question to find if a career field does in fact exist in the Army; and second, we can ask the question to determine if a career field should exist in the Army.

Some basic research was conducted to determine the formalized side of project management as a career field. Basically, this consisted of a review of DoD and Department of the Army regulations and directives. This research established a foundation or a point of departure for the remainder of my research.

Like the Constitution of the United States these formal directives and regulations are the written rules. However, like any written document there is always a body of men who bring those rules to life and keep them viable and give them meaning. This is where the true policy lies concerning questions on career patterns and what a successful officer should do to be a success in the Army.

---

\*Program and project management are considered as interchangeable titles for the purposes of this paper. From this point forward "project management" will be used since this is the Army term.

People's careers are not directly affected or influenced by what the regulations say, but rather how those regulations and directives are interpreted by the people who apply them. With this in mind, I decided that a true determination or answer to my question was available only from an attitudinal survey of senior officers in the Army--in other words a survey of the "corporate mind".

The first problem, and likewise the most important problem, to be solved, was the selection of a representative sample of this "corporate mind". After some consideration of several statistical methods of sampling I chose to use a purposive or judgment sample to survey the larger population of senior Army officers.

Success in the Army is most concretely displayed when an officer is selected for promotion to the next higher grade. From this aspect, if project management is to be a true, meaningful career field then the officers who are involved must be competitive for selection to promotion to the next higher grade when they are considered by promotion boards. This logic supported the need for the sample to include officers who had sat as members of the most recent promotion selection boards for boards for lieutenant colonels, colonels and brigadier generals.

Since the subject being discussed was project management, I felt that I needed to know how those people currently involved felt concerning this area as a career field. Therefore, I included current Army project managers in my sample. Included in the same general area are those senior officers most closely associated with project management i.e., the project managers boss--how did he see the area and did he really feel that it should be a career field? This resulted in the selection of the

functional commanders in the Army Materiel Command and additional general officers who are currently filling the top level positions in the Army Materiel Command.

To round out the sample, I felt that it should include the opinions and attitudes of the line officer, that is the user of the equipment which is ultimately produced by the project manager. Since the basic purpose of the Army is to fight, I felt that the sample would not be complete without including people from some of the operational line units. This justified in my mind the inclusion of current brigade commanders. First, they will be moving into positions of high responsibility in the future, and second many of them will be filling positions on future promotion boards.

The actual sample finally selected included the following numbers of senior Army officers:

12	Brigade Commanders
13	Project Managers
10	General Officer Promotion Board Members
7	General Officers from the Army Materiel Command
8	Colonel Promotion Board Members
8	Lieutenant Colonel Promotion Board Members
<u>58</u>	Total

Broken down by rank, the population was distributed as follows:

1	General
1	Lieutenant General
13	Major Generals
17	Brigadier Generals
26	Colonels
<u>58</u>	Total

A set of questions were asked at the beginning of the questionnaire to establish a brief biography of the respondents. This biography provides some comparison to the overall population of senior Army officers and therefore will allow some analysis of the representativeness of the sample.

The response to the questionnaire was encouraging. In spite of the fact that the questionnaire was sent to senior Army officers whose positions require long and busy days, 51 of the 58 officers took the time to respond. Two of the respondents declined to comment, (but one filled out page one) and two questionnaires were received after the data correlation cut-off date. Some respondents did not answer all of the questions. However, a high percentage of the respondents were sufficiently interested in the survey to add comments on many of the questions. Although the comments are certainly welcomed, they were not required for completion of the questionnaire. From the type of response which I received I concluded that there is a very high interest level in the premise being addressed. Even though the interest was negative in some cases, I still feel that the response was indicative of true attitudes.

## CHAPTER II

### DATA COLLECTION AND ANALYSIS PROCEDURE

#### PART I

##### Collection of Data

The data for this paper was collected through the use of a mailed questionnaire. (See Annex C.) In addition to the questionnaire, a letter of information was included. (See Annex B.) This letter explained the purpose of the survey, the subject of the survey, the non-attribution policy of the Defense Systems Management School, and gave a listing of the total sample population by group titles. The respondents did not know the total size of the group, nor did they know the size of their own group, or the names or titles of other members of the overall sample.

All of the questionnaires were mailed at the same time and each questionnaire contained exactly the same letter of explanation. The letter of explanation was not modified in any way as a function of the group to which it was being sent.

To assure the maintenance of the non-attribution policy, some of the questions in the biographical portion appeared to be redundant to certain categories of respondents. For example, one of the biographical questions (Question 4) asked; "Have you served or are you serving in a project management office?". Obviously, each

of the project managers who responded to the questionnaire answered this in the affirmative. Likewise, Question 6, "Have you commanded a battalion?" was redundant to the Brigade Commanders, since under current policy successful command of a battalion is necessary prior to commanding a larger brigade. Although these redundancies are obvious, they were necessary for the reasons stated above. The biographical questions did not affect the remainder of the questionnaire in any way and were only utilized to provide some analysis of the sample population.

At first glance, some readers might criticize the method of questioning in Question 5, that is, to ask if the respondent was familiar with DoD Directive 5000.1 by number without the inclusion of the title of the directive. This was done purposely to determine a real level of knowledge of weapon acquisition. Since DoD Directive 5000.1 is "the bible" of weapons acquisition it was felt that those people who knew the directive by number had a more extensive knowledge of the process. If the title had been given some people would have assumed knowledge of the directive. Further, determination of true knowledge of this directive was important since it states a very favorable position concerning project management. (See page 1)

To complete the analysis of the data collection method, the possibility of collusion must be addressed. The nature of the respondents almost assures a complete lack of collusion. However, the lack of collusion can be further established by the fact that most of the questionnaires were sent to different Army installations. The non-attribution policy also supports the concept that none of the respondents had any reason to confer with any other members of the sample prior to returning their questionnaire.

The modified Likert scale was used on all Questions except Question 9. This was done to allow uniformity and to permit a range of respondent opinion. Additionally, each question allowed a space for comments if the respondent desired to expand on some of his responses. The comment block was used very extensively and these verbatim, detailed comments are provided in Annex A.

On two questions the response scale was reversed, i.e., Strongly Agree was moved from the left end of the scale to the right end of the scale. This was done to preclude a mechanistic answering of the questions by the respondent. This does introduce a possibility of error in data collection, however, the elimination of a mechanistic response was felt to override the consideration that some respondents might not read the question carefully. Only three questionnaires appeared to have an error of this type, however, in each case the error was detected since the respondent added comments which were totally inconsistent with the marked responses indicated. In these cases the written comments were taken to be real feelings of the respondent and the marked responses were moved to the other end of the scale. This change was made based on the fact that the written comments were done in a more deliberate manner than the placing of the mark in a selected box.

Some respondents were critical of the reversing of the scales and from their comments added, they obviously felt that the reversal was due to an oversight on my part rather than a deliberate action to reduce mechanistic answers.

The questionnaire was not pretested, however, the draft copy was circulated to several of the faculty members of the Defense Systems Management School. The faculty members were not randomly selected, but rather were selected

because of the similarity of their backgrounds to the members of the sample who would be receiving the questionnaire. Their comments for improving the clarity and the accuracy of the questionnaire were incorporated prior to the finalizing of the questions.

The order of the lettered responses for each question stem were randomly selected to assure that the respondent would not develop a "set" based on the first response which he addressed in answering the question. The order of the responses for Question 4 and 6 were made the same because of the similarity of the Questions. The randomness was utilized to order Question 4 and then this same order was used for Question 6.

In view of the above actions taken to develop the questionnaire, it is felt that the responses do reflect the attitudes of the respondents.

## PART 2

### Analysis of Data

The analysis of the data fell into two categories. First, for purposes of discussion within the body of the study, the questions were analyzed from the viewpoint of general trends. The question responses were summarized and totalled on each side of the center scale to make a first pass determination as to whether the sampled population basically agreed or disagreed with the question being asked. After this first level of agreement or disagreement was established the question was analyzed

further to determine how strong the level of agreement or disagreement was indicated. In most questions this could be determined by looking at the number of responses in the "strongly agree" or "strongly disagree" block. The basic analysis of the questions found in the study discussion were done in this matter.

The second category of analysis was pointed towards the statistician. Here the Kolmogrov-Smirnov one-sample test was utilized. This portion of the analysis was done to determine if the responses really indicated a group opinion or were merely a grouping of answers that could have been expected from a random answering of the questions which the respondents were asked.

The null hypothesis which was proposed for the Kolmogrov-Smirnov test was as follows:

$H_0$  Each of the six blocks on the Likert scale would receive one-sixth of the scores in a random answer which indicated no group opinion.

For purposes of the Kolmogrov-Smirnov test the blocks were grouped into three parts. This was felt to be a better test for several reasons.

(1) First, this would allow the two strongest level of agreement and level of disagreement blocks to be placed together.

(2) Second, this would group together the two blocks around the center null point on the Likert scale. If any respondents had been basically undecided as to whether they agreed or disagreed with a question, this would allow the inclusion of both barely agree and barely disagree answers in the same analysis block. It was felt that this would provide more accuracy in the hypothesis.

The statistical checks were not referred to in the study discussion because I felt that most of the readers of this study would not be statisticians. Therefore, I provided the discussion data in a form which I felt would be more easily interpreted in the reading of the paper. However, for the interested statisticians the statistical annex was provided.

The statistical analysis was very supportive of the study conclusions which are discussed later in this paper. The questionnaire included thirty-six question stems for the respondents to answer. Thirty-one of the stems provided data which caused the null hypothesis to be rejected, i.e., thirty-one of the stems indicated a group opinion rather than a representation of random filling of the response blocks. Twenty-eight of these responses indicated only a one per-cent probability of being inaccurate, two indicated a five per-cent probability, and one indicated a ten per-cent probability of being inaccurate. The detailed listing of this information is shown in Annex E. Also, for the convenience of the reader, a sample calculation for the Kolmogorov-Smirnov test is shown in Annex E.

## CHAPTER III

### DISCUSSION OF THE TOTAL SAMPLE POPULATION

Chapter 1 discussed the different areas of the Army from which the sample population was selected. These items and breakdowns were known prior to the mailing of the questionnaire. However, certain other interesting conclusions can be drawn from the information collected on page 1 of the questionnaire. (See page 15)

Although this collection of biographical data was separate from the attitudinal part of the survey, a discussion of the population will give the reader a better basis from which to analyze and categorize the other information discussed later in this paper.

All of the comments below are based upon a useable sample of 48 questionnaires out of the 58 which were initially sent. (See Chapter 1)

Thirty-one (66%) of the respondents characterized their Army career as one of a Command/Operational nature. Basically, they had alternated between their branch material command positions and troop related staff positions and/or higher level general staff positions. Sixteen (33.3%) of the respondents answered that their career was one of Command/Technical nature. Like the thirty-one respondents above, they had commanded in their respective technical service branches and position of branch related staffs or higher level general staff positions. Only one of the respondents indicated that his career had been one of total staff assignments. Since he was a Finance officer, that was to be expected.

Twenty-eight (58.4%) of the respondents had served in positions related to defense acquisition/procurement activities. The remaining twenty (41.6%) respondents had not been assigned to a position related to defense acquisition/procurement.

Fourteen of the respondents (29.2%) had served in a project management office. However, you must consider the fact that twelve members of the sample are currently serving in project management offices. This becomes very key since it indicates that only two respondents (4.15%) other than the ones currently serving in that position had ever been in a project office. This may indicate that throughout the Army that firsthand information on the activities and responsibilities of a project manager is very low. The largest number of the respondents (34-70.8%) had never served in a position in a project office.

Earlier in the paper, I discussed my reasons for asking the question "Are you familiar with DoD Directive 5000.1?" The responses here were fairly evenly spread. Out of the forty-eight respondents, eighteen (37.5%) were totally familiar, sixteen (33.3%) were aware of the subject matter, and fourteen (29.2%) were not aware of the directive. This response appears to be insignificant however, a more detailed analysis points up some interesting facts. The familiarity with the directive appears to be very evenly spread with the exception of one category.

Of the six questionnaires returned from the General Officers Promotion Board, five (83.4%) were not aware of DoD Directive 5000.1. This promotion board contained twelve members. Even if we assume that those who did not return the questionnaire are familiar with DoD Directive 5000.1, we end up with 41.6% of the board not being familiar with this directive. This could become important in the

selection of project managers for promotion to General officer. As stated on page 1, DoD Directive 5000.1 contains the following guidance:

"The assignment and tenure of program managers shall be a matter of concern to DoD Component Heads and shall reflect career incentives designed to attract, retain and reward competent personnel." (1:2)

The selection of a successful officer for promotion to general officer would certainly fall into the category of "rewarding competent personnel".

Further analysis of the returned data indicated that forty-six (96%) of the respondents had commanded a battalion (One technical service respondent had not commanded a battalion, but had commanded a group.) Additionally, forty-seven (98%) had attended a senior service college. This last set of questions indicates in a general way that all of the respondents are in a position to form Army policy or will be in a position in the future.

SUBJECT: Army Project Management--A Career Field?

General Information:

Category: \_\_\_\_\_

1. Which best characterizes your overall Army career? TOTAL 48
- 31 a. Command/Operational
  - 16 b. Command/Technical (i.e., Technical Service)
  - 1 c. Staff/Technical
  - \_\_\_\_\_ d. Other (List): \_\_\_\_\_
2. What is your branch of service? \_\_\_\_\_
3. Have you served or are you serving in a defense acquisition/procurement related position?  
28 Yes 20 No
4. Have you served or are you serving in a project management office?  
14 Yes 34 No
5. Are you familiar with DoD Directive 5000.1 ?  
18 Totally familiar. 16 Aware of subject matter.  
14 Not aware of this directive.
6. Have you commanded a battalion?  
46 Yes 2 No
7. Have you attended a senior service college?  
47 Yes 1 No

GENERAL INSTRUCTIONS: Each question on the pages that follow (with the exception of question 9) contains a response block where you may indicate your level of agreement or disagreement with the question asked. Please indicate your selected response with an "X" in the appropriate block.

## CHAPTER IV

MAJOR RESEARCH QUESTION ONE: "Should project managers be selected from a specific group of officers, and if so what group?"

This question was addressed for several reasons, first, if a group of officers existed from which the respondents felt all project managers should be selected, then obviously a de facto project management career field would be in effect at this time; second, the identification of a special group, if any, would give some secondary supporting data to a later question concerning experience of project managers; and third, it would give some indication as to how the respondents saw project management, i.e., did they see it as a technical service function, a command function or a totally separate area of endeavor.

An analysis of the raw data (see last page of chapter) points up some interesting conclusions. The driving conclusion is indicated in response "e" where twenty-eight respondents out of forty-six (61%) strongly agreed that the nature of the program should be the driving consideration in the selection of project managers. Further support is indicated by the fact that forty-three respondents agreed at some level and only three of the respondents disagreed at all.

This conclusion is supported by the comments added by some of the respondents. One project manager stated:

"Matching individual to the job is the most essential element."

(See Comment 1, Q1)

Another project manager stated:

"A project manager must be first of all a manager. Arms or technical service affiliations are secondary and serve only to retain "the real world flavor."

(See Comment 2, Q1).

The second response most agreed with was response "c". Here thirty-three respondents (76.7%) agreed that project managers should be selected from officers who had completed battalion command. Eleven (25.6%) of the respondents agreed strongly. However, this point needs further analysis.

The comments indicated that it was not battalion command per se that was the desirable factor, but rather those items associated with battalion command that made it an important consideration. One project manager stated:

"A battalion commander has passed a major test of his ability to manage. Successful commanders are retainable. Pick one with a management degree".

(See Comment 2, Q1)

Here we see battalion command considered more of an acid test of the officer's competence than a specific learning of knowledge that will contribute to successful project management. A further comment that indicates that troop experience directly is not desired, but rather a tested individual, was made by a member of the colonel promotion board.

"He needs technical and managerial competence more than troop experience".

(See Comment 9, Q1)

Another member of the colonel promotion board stated:

"There's a need for a mix of back-grounds-project manager jobs/needs vary. In any case, technical preparation/experience/schooling is requisite. If troop experience can be added to that, so much the better."

(See Comment 10, Q2)

From the above analysis, it appears that battalion command is being used as a mark of excellence rather than a piece of knowledge which contributes directly to project management. One additional factor of battalion command, it is looked upon as a very necessary contact with the real world--that sobering influence of being the user rather than the developer. This aspect of battalion command should never be negated or overlooked.

The responses to "b" and "d" provide an interesting area for analysis. In each case, the selection provided an officer with a background in weapons acquisition or project management. Additionally, the response patterns to the two questions were almost identical. The initial question that arises in the analysis of these two responses is: "Why would anyone reject an officer with previous experience in these related fields?" Although both questions had a high level of agreement (about 64 to 66%) approximately a third of the respondents disagreed with this response.

This pattern of response could possibly point up an inconsistency which developed because of the construction of the question. Although this inconsistency was not apparent at the time the questionnaire was constructed,

the responses pointed up a possible area for improvement. The intent of the question was not to make the responses mutually exclusive. For example, a correct response could have been to strongly agree with each of the response stems indicated. This would indicate that the respondent felt that project managers should be selected from any of the categories. This type of response would indicate a strong support for response "e" which was discussed earlier in this chapter. However, since no specific instructions were given some respondents may have felt that essentially a ranking was desired between the five categories. This ranking could have been indicated by level of agreement on each response. The disagreement side of the response array in this case would not indicate true disagreement, but rather a lower level of agreement than those blocks checked on the specified side of the array. After some detailed analysis of this question, I have decided that this was the manner in which most of the disagreement responses to stems "b" and "d" were intended.

The only stem with which the respondents heavily disagreed (60.5%) was response "a". In this case I had to resort to the additional comments submitted to truly determine the meaning of the response. The comment by one project manager of long experience was the key to the analysis. He said;

"Project management has to be more than a passing job. People in this business must be development oriented. It helps if you are a line officer with the right background for items to be used by the combat arms."

(See Comment 4, Q1)

The wording of the stem made it appear that project management would be used as a "holding position" until the officer could again return to the duties of his branch. The desirability of long tenure for officers assigned to project manager positions also makes this choice unacceptable. One member of the colonel promotion board stated:

"He should stay at least 4 years in the job unless he is fired."

(See Comment 9, Q1)

This same feeling of long tenure was commented on by the Blue Ribbon Defense Panel Report, which stated: "Their (meaning project managers) tour of duty is too short as is their overlap with their successor." (2:28)

It was the combination of the points discussed above which made response "a" unacceptable to the majority of the respondents.

To summarize the points discussed above, the study indicates that project managers should not be selected from a specific group of officers, but rather that the needs of the program are the real driving factor. A comment by a general officer project manager states this point very well:

"Choose (the) individual on (the) basis of his proven technical (management/command) background. Interview him-- have senior boss (AMC commander) do this. Look at the man and his qualifications-- If you need an aviator with logistics background--then get an aviator with logistics background--or with (the) most experience."

(See Comment 3, Q1)

1. Project managers should be:

a. Selected from line officers (i.e., combat arms) for assignment between branch material assignments.

3	6	8	8	7	11	43
Strongly Agree				Strongly Disagree		

b. Selected from technical service corps officers with a weapons acquisition or procurement background.

5	12	12	7	5	3	44
Strongly Agree				Strongly Disagree		

c. Selected from officers who have completed battalion command.

11	9	13	4	1	5	43
Strongly Agree				Strongly Disagree		

d. Selected from line officers with previous project management office experience.

6	8	13	7	6	2	42
Strongly Agree				Strongly Disagree		

e. Selected from either line or technical service depending upon the specialized needs of the particular weapons acquisition program.

28	11	4	1	1	1	46
Strongly Agree				Strongly Disagree		

COMMENTS:

## CHAPTER V

MAJOR RESEARCH QUESTION TWO: "Should a project management officer career field be established within the Army?"

When conducting research on a particular area of interest the utility of a direct question concerning the topic cannot be over emphasized. Since this research addressed the topic "Army Project Management--A Career Field?" I felt that a valid general attitude towards the topic would best be determined by requiring the respondents to give their opinions and attitudes concerning the establishment of such a field within the Army. Response stem "a" of this question was included in the questionnaire for this purpose. (See last page of chapter.)

The spread of the responses to stem "a" were basically non-conclusive and did not indicate a specific position of the sampled group. Forty-five officers responded to this question with almost an equal split between agreement and disagreement. The slight edge of twenty-three respondents agreeing versus twenty-two respondents disagreeing was not felt to be conclusive. However, the comments made concerning this question were very conclusive--the respondents were not in favor of a project management career field. The support of the above conclusion could be left to a mere listing of the comments alone, however, I will only list the most important ones here in the body of the study. The complete listing is available in Annex A.

The objection to a project management officer career field was two-fold. First, the respondents felt that the establishment of a career field might create an "elite" group of officers who would become out of touch with the problems of the user specifically and the problems of the Army in the field generally. One project manager commented:

"One must be careful of a PM career field. With reduction in projects, numbers and size, the opportunities for advancement to PM are very small. Also a PM must not lose touch with the user in the field." (Emphasis Added.)

(See Comment 5, Q2).

A brigade commander who strongly disagreed with response "a" commented:

"PM functions should tie in closely w/combat developments doctrine organization. 'Sterilization' of officers in a vertically oriented career field in project management does not foster this."

Since Question 7 addressed assignments and career patterns if a project management career field were established, some of the comments listed there apply equally well to the points covered in this chapter.

A general officer project manager summed it up very nicely. He stated:

"I reject the idea of 'isolated specialization'. I believe that the officer and the Army will both benefit from 'Army associated' tours such as troop duty, support operation(s) and staff in the traditional sense with 'specialization' in no more than 30% of a career pattern."

(See Comment 2, Q7)

Responses "c" and "d" were both rejected very strongly. In each case thirty-eight (90.5%) of the respondents disagreed with a project management career field containing only technical service corps officers and also a career progression which allowed line officers involved in the specialty, branch material assignments only through the rank of captain.

The second objection to a project management career field stemmed from the effect it would have on the career of the individual officer involved. This concern for the career of the individual officer was further accented by the responses to stem "b". This was the only stem which indicated conclusive agreement. Twenty-seven (64.4%) respondents felt that if the career field were established it should include possible career progression to general officer level within the field. One general officer project manager stated:

"If a career field can be designed to ensure PM officers remain competitive with contemporaries at boards (promotion, command, schools, high level staff) then establish a separate career field. I am concerned that we may develop a career field with officers being further separated from 'mainstream' Army career enhancement assignments."

(See Comment 3, Q2)

Most of the respondents did not object to a career field in the sense of OPMS. The main objection was to a project management career field where the officer would become totally specialized at the expense of operational or branch related assignments. A project manager commented:

"If we have a field, it must provide for GO opportunity. However, it (the career field) must be purely voluntary in OPMS set-up, and provide flexibility for command of troop units thru Battalion level at least."

(See Comment 1, Q2)

Another objection to the establishment of a project management career field was that an additional speciality was not required. It was felt that the phases of the weapons acquisition cycle lend themselves to the current existing specialities. A general officer project manager commented on this area:

"At this time specialization works to the disadvantage of an officer. I feel that the PM can best be selected from 'generalists' who have management degrees or experience. For projects in the early stages the PM could be chosen from the R&D career field--toward the end of development either the Procurement or the Logistics field have a wealth of experienced managers."

(See Comment 2, Q2)

As stated earlier in the paper, further analysis was done on the questions utilizing the Kolmogorov-Smirov test. With regard to response stem "a", the null hypothesis was rejected, indicating that the responses did indicate a group opinion. The highest collection of responses was in the "strongly disagree" end of the spectrum. Eighteen of the respondents indicated their answers in one of the two end blocks. This was further supported by the comments of the respondents. However, one caution must be kept in mind, in surveys many

times the most vocal respondents are those who object to a hypothesis. Nevertheless, based upon the data submitted in response to my research, I would conclude that the establishment of an officer career field in project management is not acceptable to the respondents.

The group did display a conditional acceptance of a career field in the sense of OPMS, that is, to create a field where the officer alternates between his branch material assignments and the field of project management.

The dilemma is clear; the "corporate mind" of the Army would accept a specialist in project management as long as he retains his competitive qualifications in his branch material requirements. Project management requires extended tours for the good of the project, while the competitive Army officer can ill afford more than three years in any one assignment. Possibly one career does not allow time for it all--this may explain why most of the current project managers did not enter the field until after they had completed battalion command and in many cases not until they had successfully completed command at the colonel level.

It is surprising that even general officers who are directly involved with materiel acquisition do not support a career field that would produce experienced project managers. One general officer in the Army Materiel Command stated:

"We don't need a PM career field.  
Need officers of varied backgrounds  
and some functional expertise to  
bring to bear on weapons acquisition."

(See Comment 8, Q2)

2. A project management officer career field:

a. Should be established within the Army.

2	11	10	4	9	9	45
Strongly Agree						Strongly Disagree

b. Should include possible career progression within the field to general officer level.

8	12	7	6	2	7	42
Strongly Agree						Strongly Disagree

c. Should include only technical service corps officers.

0	2	2	1	13	24	42
Strongly Agree						Strongly Disagree

d. Should include only line officers with branch material assignments through the rank of captain.

0	1	3	3	9	26	42
Strongly Agree						Strongly Disagree

COMMENTS:

## CHAPTER VI

MAJOR RESEARCH QUESTION THREE: "How does project management experience compare in responsibility to other Army assignments?"

Many times when careers are being discussed, manner of performance is mentioned as the first yardstick of comparison. However, most people go on to add an additional qualifier; they usually state, "Assuming that both officers are assigned to a responsible position." Since manner of performance is a universal comparative, I felt that it was important to determine how the respondents saw project management when compared to other responsible positions.

The comparatives utilized in the question were selected very carefully. Obviously, the question could not address all other officer positions in the Army. Rank equivalent command was selected for obvious reasons. I feel that this comparative needs no further explanation or justification. Rank equivalent principal division staff positions represent general staff, however it is still general staff with troops. In the minds of many this level staff work comes next after command. Rank equivalent Department of the Army staff positions are involved in the policy making process; in civilian terms, this is experience at the corporate level. Finally, the comparative of corps or field army staff was included to complete the spectrum of comparison. This is the interface between field staff work and the corporate level discussed above. All of the comparative positions are noteworthy, and together they present a complete spectrum of choices to the respondents.

This question was directed specifically to the project manager and did not refer to any of the other positions in the project office. This was clarified to the respondent by the explanatory note added to response "b" which stated: (e.g., COL PM equal Bde CO).

A detailed analysis of the comments submitted on this question, indicate that the respondents interpreted the question correctly, i.e., to only apply to the project manager. For example, a general officer in the Army Material Command stated:

"Have selected 3b only because it is most nearly descriptive. Actually I think many PM jobs require more responsibility than the average Bde. command. Length of tour is very important in this connection."

(See Comment 8, Q3)

It is reasonable to assume that the above comment would not be applied to lieutenant colonel action officer positions within the project office. Another comment which supports the thesis that the question was properly interpreted was submitted by a member of the lieutenant colonel promotion board. His statement was:

"Certainly PM responsibilities exceeds division, corps and field Army staff positions in complexity, etc. Frequently exceeds Bde C.O. and DA staff level also."

(See Comment 10, Q3)

Based on the analysis above, we can assume that the question was properly interpreted by the respondents.

The respondents as a group agreed strongly that project manager experience was equal in responsibility to all four categories listed. In order of preference, they agreed

most strongly (81%) with rank equivalent DA staff positions; the second level of agreement (78%) was with rank equivalent corps or field army staff positions; the third level of agreement (73.2%) was with rank equivalent principal division staff positions. Normally, this would be the division chief of staff position. The lowest level of agreement (67.5%) was with rank equivalent command positions. Even in this position, seventeen (39.5%) respondents strongly agreed that the position was equivalent to command.

In view of the importance attached to command as a necessary experience for advancement to the highest levels of the Army, I feel that this point requires further discussion. The strongest level of disagreement with the rank equivalent command question was demonstrated by brigade commanders. Seventy per cent (70%) of the brigade commanders who responded disagreed that project manager experience compared to command at the same rank level. This is noteworthy since these brigade commanders are filling the command positions to which the questionnaire was drawing a comparison for project management. Command is a jealously guarded position and rightfully so. However, it is just as noteworthy that none of the brigade commanders who responded to the questionnaire had ever served in a project management office. The brigade commanders who chose to add comments were in favor of the equivalency although with some reservations. One Brigade Commander stated:

"Ref B-Yes from point of view of promotion and school selection boards. But given a 2-star general to be selected for division command, all else equal, I'd probably opt for the fellow who had a healthy dose of Bde command over the fellow who had been a PM only."

(See Comment 14, Q3)

Another Brigade Commander who agreed strongly with response "b" stated:

"Answer to b says it all PM should be command credit!"

(See Comment 16, Q3)

On the other end of the response spectrum, nine out of eleven project managers (81.7%) agreed that the position was equivalent to command. Out of the nine who agreed, eight (72.6%) agreed strongly that project management was equivalent to command. The project managers responses take on greater significance when we consider the fact that out of the eleven project managers who responded, one had commanded a group, and nine had commanded battalions. They are obviously not ignorant of the responsibilities of command.

One project manager did not feel that his position compared to command. He stated:

"While difficult to assess since programs vary in size, scope, responsibility demands, for the combat arms officer it will rarely match Bde responsibilities-- probably never in the eyes of selection boards in our time."

(See Comment 2, Q3)

Again, we see the concern for promotion and career progression raised when we speak of "command equivalent" for project managers. However, a member of the general officer promotion board stated:

"It's a tough challenging & satisfying experience worthy of the highest equivalency positions."

(See Comment 6, Q3)

One general officer from the Army Materiel Command objected to any attempt to draw equivalency between project management and staff positions. He said:

"PM is command by current definition. Therefore it does not correlate with staff."

(See Comment 9, Q3)

I have included the individual comments above to show the wide variance in feelings about project management and command equivalency. Possibly the key lies in a comment by a member of the colonel promotion board. He stated:

"One evaluates each project manager's job including how much responsibility he is, in fact, given."

(See Comment 13, Q3)

This may be the key. Possibly many people who object to the command equivalency are not fully aware of the responsibilities faced by the project manager. This will be discussed at greater length in a later chapter.

3. Project manager experience is equal in responsibility to:

a. Rank equivalent DA staff positions.

2	1	5	0	10	24	42
Strongly Disagree				Strongly Agree		

b. Rank equivalent command. (e.g., COL PM equal Bde CO)

4	6	4	5	7	17	43
Strongly Disagree				Strongly Agree		

c. Rank equivalent principal division staff positions.

2	5	4	4	8	18	41
Strongly Disagree				Strongly Agree		

d. Rank equivalent corps or field army staff positions.

2	3	4	4	8	20	41
Strongly Disagree				Strongly Agree		

COMMENTS:

## CHAPTER VII

MAJOR RESEARCH QUESTION FOUR: "How does a lieutenant colonel project manager compare to battalion commanders for promotions and selection for senior service colleges?"

The major research question of the previous chapter was how the colonel project manager compares to his contemporaries in rank equivalent command and staff positions. Likewise, this major research question was designed to determine similar equivalencies for the lieutenant colonel serving in project management. Currently, there are no project manager positions in the Army system which call for the rank of lieutenant colonel. This could detract from the accuracy of the question, as a matter of fact, one general officer in the Army Materiel Command commented:

"I would not even compare a PM with a battalion commander. I might compare him to Bde or Div Arty commanders. In my judgment you are setting your sights too low w/this question. It should be eliminated."

(See Comment 8, Q4)

Initially, I considered throwing out the questions (4 and 6) as recommended above. However, after careful evaluation of the comments added and the data as a whole, the decision was made to retain the questions and to include the clarifying comment above. This was

done for several reasons; first, many of the respondent's detailed comments indicated that they had drawn the comparison between two lieutenant colonels even though currently no lieutenant colonel project manager positions exist; second, although the questionnaire is made up of several individual questions, the overall research objective could not be met by leaving out these two very important questions; third, to eliminate these questions would also eliminate many very valuable respondent comments, comments which are capable of standing alone and making the point intended by the respondent. Therefore, I submit the question to the reader's judgment. In light of the earlier warning stated, the recommendation to eliminate the question, and the overall data of the analysis the reader may stand as the final judge. My analysis and data are presented here in their entirety. To eliminate one question and its related data based on the recommendation of one respondent could possibly prejudice the study and impose the values of one respondent on the total reading population. These are the candid facts of this major research question. Let the reader retain or eliminate the question based on his own sense of values and analysis.

The responses to questions four and six were almost exactly the same. (See last two pages of this chapter.) As a matter of fact, several respondents answered question six merely by writing the note, "See question 4". (NOTE: As stated earlier in Chapter II, the responses and the order of the responses in Questions 4 and 6 were exactly the same. Only the question stems were different. For detailed differences see pages 44 and 45 .)

The respondents indicated a high level of agreement that they would consider the project manager equal to the battalion commander, both for promotion selection and selection for a senior service college. Seventeen (40.5%) respondents strongly agreed with this comparison and a total of twenty-six (62%) respondents indicated their choice on the agree side of the response spectrum. This response was purposely placed first in the question array to preclude any set in the mind of the respondent. Also, this response provides a comparison base to determine consistency on the responses of the other questions.

Response "b" narrowed the comparison further. Here the respondent was asked to compare the technical service project manager with the line battalion commander. Although the percent of the respondents (63.4%) agreeing with the comparison was greater than those who agreed with the equality statement, fewer respondents (31.7%) strongly agreed with this comparison.

Responses "c" and "d" were probably the most difficult responses in the two questions being analyzed here. The respondent was asked to select either the project manager or the battalion commander at the expense of the other position. Obviously, it was a hard choice to make since both are important positions to the Army. The toughness of the question is further indicated by the number of respondents who added comments to clarify their position. Some of the respondents chose not to answer at all.

A general who was a member of the general officers promotion board stated:

"This is not too relevant because promotion boards receive guidance on what specialties are needed and don't compare Bn command with project management experience. Each competes within his own experience field."

(See Comment 6, Q4)

A member of the lieutenant colonel promotion board commented:

"This is a tough one. Needless to say the total record is considered when making selections. Degree of responsibility associated with assignments is key. As with the Advisor Program in RVN, it is difficult to relate or equate between management and command as to degree of responsibility unless the gray area is defined. People who stay to(o) long in the PM business may suffer."

(See Comment 12, Q4)

It is interesting to note that the respondent who made the above comment was inconsistent in his responses to both questions four and six. He agreed that he would select the project manager over the battalion commander, but likewise agreed more strongly that he would select the battalion commander over the project manager. Since the question precluded the selection of both the project manager and the battalion commander, we must assume that he would select the battalion commander over the project manager since this is the response with which he most strongly agreed. His final sentence in the comment is also indicative, where he said: "People who stay too long in the PM business may suffer." Although the respondent had never served in a project management office, he had served in a defense acquisition/procurement related position. Perhaps the little bit of knowledge which he had gained in his acquisition related position was what made the choice so difficult. This may indicate that if more people were truly aware of the responsibilities of project management, that they might not find it so difficult to give credit to those officers serving in project management.

Another member of the same lieutenant colonel promotion board who had served in the headquarters of the Army Materiel Command was very definite in his choices. He stated:

"As a general rule I would tend to select the PM over the commander of equivalent grade. (Emphasis added) Fortunately, this kind of dilemma only occurs in the abstract."

(See Comment 11, Q4)

His checked responses were consistent with the above added comment.

A member of the colonel promotion board who had served in a defense acquisition/procurement related position and was a combat arms officer, commented:

"Good program managers are rarer than good battalion commanders."

(See Comment 14, Q4)

His responses were also consistent with his comment.

A general officer project manager indicated very strong feelings toward the selection of the battalion commander over the project manager. As a matter of fact, the only response with which he did agree was to select the battalion commander over the project manager (response "d"). He disagreed with the other responses. Since this respondent has had command experience, project management experience and is a general officer, I felt that I should analyze his responses in more detail. He added a comment which stated:

"While the PM has many of the same responsibilities as a commander he does not have the 24 hour a day responsibility for the discipline, welfare, and leadership of the Army soldier. The successful battalion C.O. has passed this acid test and has a greater overall value."

(See Comment 2, Q4)

As I stated earlier in Chapter IV, here again, we see the battalion command referred to as an "acid test" of the man rather than a specific set of experiences that would directly contribute to successful project management. Another key point in this comment is that the successful manager must display his ability to *manage troops*. It is interesting that we do not require the troop commander to go through an "acid test" of a project management position to display his managerial ability. Somehow troop command has become a necessary stamp of quality for any man which we select in the Army for any position of high responsibility. No attempt is intended to degrade troop command; I agree that repeated troop command positions of increasing responsibility are very necessary to provide the best commanders available to our soldiers. However, the same logic leads me to conclude that repeated project management tours, also of increasing responsibility, are just as essential to provide the best managers available to assure that the equipment provided to our soldiers is totally effective.

As I stated in Chapter IV, I believe that the battalion command tour is being used as an indicator of good men. There are certainly other ways to be just as selective and still select project managers who have had extensive experience in the acquisition field.

This same "proof" syndrome was indicated by the comment of a colonel project manager. He said:

"A LTC must prove himself as a bn C.O. prior to making COL both tech svc and line. Also true of COL to General Officer."

(See Comment 4, Q4)

The above comments and discussion may be the key as

to why many Army officers find it difficult to give the same credit to project management experience as they do to battalion command experience.

A general officer in the Army Materiel Command commented:

"Bn CO are equal to PM(O5) and vice versa. Both would be selected. A program manager does NOT (Emphasis his) get credit for command under today's rules."

(See Comment 10, Q4)

Another Army Materiel Command respondent stated:

"I would compare performance wherever it occurs, not job."

(See Comment 9, Q4)

The above two comments indicate a separate evaluation for officers who display a facility to command and officers who display great managerial ability in the field of project management. It is obvious from the responses and the comments on my questionnaire that most of the respondents found it difficult to select either the battalion commander or the project manager at the expense of the other position. However, the respondents agreed strongly to the equality of the two positions.

This viewpoint of equality was further strengthened by a comment of a member of the colonel promotion board. He stated:

"The board should be given quotas so that this problem/question doesn't arise."

(See Comment 9, Q6)

As I stated in the first chapter, today's complex weapons systems and the related acquisition process demand officers with experience in the field. The role of the

Army remains the same--to close with and destroy the enemy wherever he may be found. We are very selective in providing the men who manage the interface between enemy and friendly forces--the commanders. Normally a man does not command a battalion unless he has successfully commanded a company; likewise, a brigade commander must first demonstrate his proficiency as a battalion commander. These prerequisites are obvious, to provide the man experience in the field of troop command.

The project manager is faced with a different, but equally important mission. He is charged with the responsibility of providing the best weapons available to the American fighting man. However, his interface is a totally different one, he is interfacing with the managers of American industry. This requires a different set of skills, but not lesser skills. If we utilize the same criteria for the selection of project managers as we do for the selection of brigade commanders, then the individual selected needs to display his ability to manage in the weapons acquisition arena at the lower level. In order to be a colonel project manager on a major project, the man selected should be required to display his managerial ability at the lieutenant colonel level on some smaller project, or the subsystem of a larger project. However, time does not always allow complete experience in both the command and project management fields. These considerations will be expanded further in a later chapter.

The final question asked in support of this major research question was to consider the equality of a technical service corps project manager with a technical service corps battalion commander. The highest level of agreement by the respondents was indicated on this response. (Response "e") Nineteen (44.2%) of the respondents strongly agreed

that the technical service project manager was equal to the technical service battalion commander. Overall, thirty-three (76.6%) agreed to this equality. It is interesting to note that although the technical service battalion commander faces the same twenty-four hour responsibility as the combat arms battalion commander, for some reason it was not considered the same. For example, a member of the colonel promotion board commented:

"Tech svc program manager's task often much more difficult than command of a small tech svc battalion."

(See Comment 15, Q4)

Later in the questionnaire, the same individual commented:

"Tougher to be a manager than CO of many tech svc battalions."

(See Comment 8, Q6)

This comment was made by a general officer who had served in Infantry, Armor, and Artillery branches. However, he had never served in a project office, nor had he ever served in a defense acquisition/procurement related position. His checked responses were consistent with his comments; he strongly agreed to the equality of the project manager to the battalion commander, the equality of the technical service project manager to the line battalion commander, but strongly disagreed in selecting the project manager or the battalion commander at the expense of the other position. As the responses above indicate, he disagreed with the equality of the technical service battalion commander to the project manager. Apparently from his comments, the size of the responsibility was the comparator rather than the acid test of troops which was discussed earlier.

To summarize, "How does the lieutenant colonel project manager compare to battalion commanders for promotions and selection for senior service colleges?", I offer the following discussion.

Generally, the respondents agreed to the equality of the project manager (lieutenant colonel) to the battalion commander. This was true in both the case for promotion and the case for selection to a senior service college. However, when the respondent was placed in the position of selecting one or the other, but not both, the attitude changed. If placed in the position of making this decision (and many respondents commented on ways to avoid this type of decision), the respondents would choose the battalion commander over the project manager. This attitude is summed up very accurately by a project manager who stated:

"Assuming grade of LTC. The equal PM  
will be at a disadvantage. He must  
demonstrate a plus factor based on broader  
experience/talents to win. What you are  
weighing is opportunity--not demonstrated  
performance."

(See Comment 1, Q6)

4. As a member of a promotion selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

17	4	5	9	4	3
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Strongly Agree Strongly Disagree

42

b. Consider a technical service program manager equal to a line battalion commander.

13	8	5	3	5	7
----	---	---	---	---	---

Strongly Agree Strongly Disagree

41

c. Select the program manager over the battalion commander.

5	2	7	3	5	7
---	---	---	---	---	---

Strongly Agree Strongly Disagree

42

d. Select the battalion commander over the program manager.

7	8	8	8	7	10
---	---	---	---	---	----

Strongly Agree Strongly Disagree

44

e. Consider a technical service program manager equal to a technical service battalion commander.

19	6	8	1	5	4
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Strongly Agree Strongly Disagree

43

COMMENTS:

6. As a member of a senior service college selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

19	5	4	6	3	6	43
Strongly Agree				Strongly Disagree		

b. Consider a technical service program manager equal to a line battalion commander.

13	9	4	3	5	7	41
Strongly Agree				Strongly Disagree		

c. Select the program manager over the battalion commander.

3	3	6	10	3	14	43
Strongly Agree				Strongly Disagree		

d. Select the battalion commander over the program manager.

5	7	10	8	4	7	45
Strongly Agree				Strongly Disagree		

e. Consider a technical service program manager equal to a technical service battalion commander.

18	13	2	2	4	4	
Strongly Agree				Strongly Disagree		

COMMENTS:

## CHAPTER VIII

MAJOR RESEARCH QUESTION FIVE: "What career background and experience is desired for general officers in the Army Materiel Command?"

In the consideration of, or establishment of, any career field the question of progression to responsible, high level positions of authority must be addressed. To the young officer entering a particular field of endeavor, it must be apparent that his talent and abilities will not be restricted by the lack of the opportunity to advance to responsible positions requiring a high level of capabilities. If these restrictions do exist, many talented young men will direct their energies and attention to other more fruitful fields. Obviously, the type of work which the career field offers is a large part of the individual's career selection criteria, however, it would be naive to assume that job satisfaction could totally replace the basic human needs for promotion, recognition and prestige. According to Maslov's hierarchy of human needs, once the needs of job satisfaction have been met, there is a higher set of needs for which the individual strives. These needs can only be met through positions of the greatest responsibility and prestige.

There is an additional consideration for assuring positions at the highest levels of responsibility and prestige when considering a career field. The Army is considered a very competitive profession. This is not to say that it is unique from industry, but to point out that

this is a very real characteristic of the profession. Everyone likes to feel that they are running the "big race", i.e., competing for the highest stakes. Capable officers would not like to feel limited by a lid on their particular area of interest.

With the above ideas in mind, I analyzed current general officer positions within the Army in light of two considerations. First, where could the talents gained through project management experience be utilized to the best advantage of the Army; and second, what general officer positions would be most attractive to an officer whose interest lay in the field of defense acquisition/procurement related activities. Of the three major commands currently in existence, i.e., FORCECOM, TRADOC, and AMC, the Army Materiel Command was the obvious choice. There were other obvious general officer positions on the Army staff such as the Chief of Research and Development and the Deputy Chief of Staff for Logistics, however, the largest collection of positions existed with the Army Materiel Command. Further, I felt that the Army staff positions were open to any capable officer displaying the competence required.

Based upon the above rationale and analysis, I decided to question the respondents, concerning their attitudes towards the filling of general officer positions in the Army Materiel Command. Hence, the reason for the inclusion of Question 5 in my research questionnaire.

The highest level of agreement was with response "d". Forty-five (97.8%) of the respondents felt that the positions should be filled by both line officers and technical service corps officers. This was assuring since it indicated that there was not a parochial attitude toward reserving the hierarchy of the Army Materiel Command to the officers in the technical service corps. The one respondent who disagreed that both line officers and technical service corps

officers should fill the general officer positions in the Army Materiel Command was a general officer with a technical service corps background who was currently serving in the Army Materiel Command. He stated in an added comment:

"There are some jobs that anyone can fill, Compt(roller), Personnel, Chief of Staff,--fundamentally though I favor Tech Svc officers in all other jobs."

(See Comment 7, Q5)

Earlier in the questionnaire in a comment regarding Question 1, this same respondent stated:

"I think PM's should come from Tech Svc people who have experience in their commodity/weapons systems area--Engr, Proc, R&D, Support combined--Bn cmd doesn't impress me." (NOTE: He had commanded a battalion.)

(See Comment 6, Q1)

His checked responses were consistent with his comments. Although this respondent was one out of forty-six, his position warrants further analysis.

Although his comments indicate that he feels that project managers should come from the technical service corps, in Question 1, he did agree in response "e" that project managers could be from either line or technical service depending upon the specialized needs of the particular weapons acquisition program. However, his comment above indicates that he would prefer project managers who had a background in the functional areas of the Army Materiel Command.

From the above comments I can foresee a possible rapport problem on the part of the project manager. In addition to the overall responsibility of managing the project, the project manager provides a very real interface between the project and the functional commands of the Army Materiel Command. He also provides the same interface between the user and the project. To be fully effective he must establish complete rapport with both groups of people. To be acceptable to many senior officers in the Army Materiel Command, he would need to have a background and experience in varied positions within that command. To be most acceptable to the user, he would need to have experience in the same branch as the most interested user, i.e., in the development of the Main Battle Tank, the user would feel most comfortable with a project manager with some armor branch experience. This argument negates a project management field consisting entirely of technical service corps officers; equally, it negates an argument for all project managers to be entirely from the combat arms branches. However, the combat arms officer must still gain experience in the defense acquisition/procurement related fields. Possibly time would not permit sufficient experience in his line branch to remain competitive with his command oriented peers, and at the same time gaining appropriate experience in defense acquisition/procurement related positions. This points up the need to establish acceptable, credible lieutenant colonel command equivalent positions in the field of project management.

The argument above is supported by response "e" of this major research question. Thirty-two (78%) respondents agreed to line officers with operational and acquisition/project management backgrounds being utilized in the general officer positions of the Army Materiel Command. One project

manager amplified this with the following comment:

"AMC needs both types of GO's, but line O's should have para. e talents as a rule. Exceptions are, of course, justified."

(See Comment 1, Q5)

(NOTE: The paragraph e. talents to which he is referring are operational and acquisition/project management background.)

A general officer project manager stated:

"Takes both, but tech services should hold the key positions--not all. Need flavor of some arms officers in AMC."

(See Comment 3, Q5)

A member of the lieutenant colonel promotion board supported response "e" with this comment:

"A mix is the best solution; Line and tech service; line with acquisition background; (emphasis added) tech service with an operational background; There are enough of both types."

(See Comment 8, Q5)

Although the respondents also agreed with responses "a" and "b", the level of agreement was lower. This is probably due to the fact that some respondents treated the selection of this response as meaning an exclusive filling of the general officer slots with officers possessing the type of background indicated. (See page 52 for the detailed wording of responses "a" and "b".)

The respondents disagreed with response "c" which indicated line officers with an operational background for the general officer slots in the Army Materiel Command. Part of the disagreement was due to the rationale discussed

above. However, there is some indication that the feeling of equity of general officer positions also crept into this response. As one project manager commented:

"Combat arms officers mainly do fill Bdes/Div/Corps/Army positions with tech svc officers in certain related key positions. This concept should mainly apply for tech svc officers in AMC."

(See Comment 4, Q5)

This is obviously a true feeling on the part of the technical service officers and rightfully so. This feeling relates back to my comments earlier in this chapter concerning the requirement that all career fields require a rank and responsibility progression to the highest positions. I think that it is reasonable to assume that most of the technical service corps officers see the Army Materiel Command in this light. I say this because most combat arms officers see division command in the same light.

In summary, the major research question responses did indicate that the respondents felt that the general officer positions in the Army Materiel Command should be open to combat arms officers with certain acquisition related backgrounds, as well as to the technical service corps officers. This is gratifying, since it does indicate that there are general officer positions which could be filled by capable officers who would choose project management as a career field.

A general officer who is currently serving in the Army Materiel Command summed it up very well when he stated:

"General officers, like any other responsible position, should be filled with the best qualified officers available. They should be selected on basis of proven performance, background, training and experience. A mix of line and tech svc background is as important as a mix of acquisition and logistics training and experience."

(See Comment 6, Q5)

5. General officer positions in the Army Materiel Command should mainly be filled by:

a. Officers with a technical service corps background.

7	10	8	8	4	5	42
Strongly Agree			Strongly Disagree			

b. Line officers with a background in acquisition or project management.

3	9	15	7	4	2	40
Strongly Agree			Strongly Disagree			

c. Line officers with an operational background.

1	6	9	10	4	9	42
Strongly Agree			Strongly Disagree			

d. Both line officers and technical service corps officers.

29	10	6	1	0	0	46
Strongly Agree			Strongly Disagree			

e. Line officers with both operational and acquisition/project management background.

9	11	12	5	2	2	41
Strongly Agree			Strongly Disagree			

COMMENTS:

## CHAPTER IX

MAJOR RESEARCH QUESTION SIX: "If a project management career field is established what should be the structure of officer assignments?"

This question ties in very closely with the major research question discussed in Chapter V. As was summarized in Chapter V, the consensus of the respondents was that a project management specialty should not be established in the pure sense of specialization. These attitudes again reflect in the replies to the seven responses of Question 7. (See last page of the chapter.)

It is very clear from the responses to this question that the respondents do not feel that an officer in the field of project management should be divorced from his basic branch or arm. In response "c", thirty-five (79.5%) felt that officers in a project management career field, if it was established, should return to branch material assignments as commanders. As one project manager commented:

"There has to be cmd opportunities open for the successful competitors. Too narrow a pattern will result in rejection by many who you would most want as PM's in senior grades."

(See Comment 1, Q7)

Again, we see command mentioned as a required assignment to keep officers competitive for selection to positions of higher responsibilities. A general officer project manager commented specifically in this area. He stated:

"Must keep them competitive; i.e., don't keep them in PM too long--many years continuously."

(See Comment 3, Q7)

This poses a direct conflict with a question discussed in Chapter IV where the respondents indicated that project managers should not be selected from line officers for assignment to the field between branch material assignments. To repeat a comment by a project manager of long standing, he said:

"Project management has to be more than a passing job."

(See Comment 4, Q1)

An additional conflict also arises with the recommendations of the Blue Ribbon Defense Panel. The panel stated in their report:

"Their (program managers) tour of duty is too short as is their overlap with their successor." (2:28)

It is hard to meet the requirements of long tours in project management and still keep the personnel competitive as stated in the earlier quote above.

The other responses of Question 7 further supported the dislike of the respondents for any pure specialization in the area of project management.

Thirty-seven (86%) respondents disagreed that officers in a project management specialty should not return to branch material assignments above the rank of major. The level of disagreement is punctuated further when you consider that twenty-four (55.8%) strongly disagreed with this statement. A general officer project manager commented specifically on this response. He said:

"Still need some branch material asgmt's after making major esp. true for line officers but also for tech svc (maybe every 3d asgmt)."

(See Comment 3, Q7)

In response "b" the disagreement was even greater than with response "a". Thirty-nine (88.6%) respondents disagreed with the premise that officers specializing in project management should serve in branch material assignments only as staff officers. Again, the level of disagreement was accented by the fact that twenty-one (47.8%) of the respondents indicated strong disagreement. The message is clear--project managers should serve as commanders at the appropriate level. One member of the general officer promotion board commented:

"I agree with the OPMS concept. We need specialists but the best opportunities/challenges are dealing with people and their problems."

(See Comment 6, Q7)

As one might expect, the respondents also disagreed with the concept of officers specializing in project management upon completion of branch material company command. One member of the lieutenant colonel promotion board merely commented: "Too early." (See Comment 9, Q7). Obviously, this is consistent with other responses on this question and earlier questions discussed.

One other response was included in the array of Question 7. Response "d" was included to determine if a "bridesmaid syndrome" might develop if a project management career field was established. In other words, I wanted to determine if the respondents would accept a German General Staff concept of specialization where the specialists would provide a high level of expertise to a project manager who was basically from an operational background. Again, the response was one of definite disagreement. Thirty-three (75%) of the respondents disagreed in general and nineteen (43.2%) of the respondents disagreed strongly.

This disagreement was based on two aspects. First, many deputy project managers are civilians and current project managers are generally in favor of this arrangement because it provides continuity within the project office. One project manager commented specifically on this aspect; he said:

"The Deputy PM has traditionally been a civil servant. This is good since it provides continuity between PM's out over a long time span and it balances the headshed, since most of the staff are civilian."

(See Comment 4, Q7)

Second, the response was rejected based upon the general objection to pure specialization in the project management career field. In this regard, a general officer from the Army Materiel Command commented:

"Project management is not so specialized that one would make it equal to a professional career such as that of an M.D. In fact, I think an elite group as posed in this array (referring to the responses of Question 7) would be detrimental to top notch PM programs."

(See Comment 8, Q7)

The general feeling towards a pure project management career field, and specifically Question 7, was indicated very concisely by a general officer serving in the Army Materiel Command. Rather than checking any blocks in Question 7, he merely added the following comment at the bottom of the page:

"No answer--do not agree that a PM career field should--or will--be established."

(See Comment 7, Q7)

7. If established, I feel that officers in the project management career field should:

a. Not return to branch material assignments above the rank of major.

0	1	5	4	9	24	43
Strongly Agree				Strongly Disagree		

b. Serve in branch material assignments only as staff officers.

1	1	2	6	12	21	44
Strongly Agree				Strongly Disagree		

c. Serve in branch material assignments as commanders.

15	9	11	5	1	2	44
Strongly Agree				Strongly Disagree		

d. Serve only as Deputy Project Managers to provide expertise to Project managers selected from officers with an operational/ command background.

2	3	5	6	8	19	44
Strongly Agree				Strongly Disagree		

e. Specialize in project management upon completion of branch material company command.

3	6	12	3	8	12	45
Strongly Agree				Strongly Disagree		

COMMENTS:

## CHAPTER X

MAJOR RESEARCH QUESTION SEVEN: "If you were responsible for selecting a new project manager to replace an unsuccessful project manager and correct deficiencies in the overall program, what type officer would you select?"

This question was designed not only to determine who the respondents would select for the difficult task of "turning the project around" and heading it in the direction of successful completion, but also to survey the feelings of the respondents toward project management experience.

During the drafting phase of the questionnaire, I addressed different approaches to this question. An obvious approach was to ask "What type of officer would you select as a project manager of a new project?" However, this question was rejected in favor of the question at the top of the page.

My research intent was to determine the true feelings of the respondents towards project management experience. I felt that there were some analogous points and considerations between the conditions under which the respondents were selecting the officer they would choose to be the project manager and a discussion which I read concerning management style.

In the field of management theory and behavior, there is a widely used concept called the managerial grid. This grid is based on the concepts that managers are generally concerned with two basic areas. One is a concern for production and the other is a concern for people. Through

a basic set of questions which are answered by the individual, his management style can be determined. The procedures and use of the grid are not directly important for the purposes of this study, however, some of the discussion points are directly analogous and do apply.

The grid determines a preferred style of management and also a back-up style. In the discussion of the grid, the following comment is made:

"People frequently abandon their most preferred techniques during periods of stress, and it may be that your first back-up style will convey more significant information to you than your first choice score will." (3:NP)

We have all seen this sort of thing in practice. For example, normally battalions are commanded by an officer of the proper branch. This is the first choice because of convention, the officer's background and experience and the desire to train officers equally in all branches. Here the concern for people is somewhat higher because production is also being met. However, if "production" starts to slip and the battalion fails to meet its normal objectives and missions the selection of a new battalion commander takes on a different perspective. The higher level commander may now select the new commander from a "back-up" position because of the problem the unit is facing. I have been in infantry divisions where it was proposed that the best way to straighten out a faltering engineer battalion was to assign an infantry commander. Or likewise, in an armor division we might find the commander proposing the assignment of an armor officer to straighten out a less than effective rifle battalion. During periods of stress we find the selection of the new commander being based more on the senior commander's experience and biases rather than convention.

Using a similar rationale and logic as that discussed above, I decided that I could best survey the feelings of the respondents towards project management experience by placing them in the atmosphere of a failing program and asking them to select the type of officer which they would want to take over the program. To paraphrase a comment made in the quotation, I felt that the respondents "back-up style would convey more significant information. . . ."

The respondent was asked to choose between three types of officers. The first officer was a member of the project management career field and had demonstrated success on previous projects; the second officer was a line officer who had demonstrated success in previous line assignments to include battalion command; and the third officer was a known "problem solver and expediter" with no regard to previous experience.

Basically, the respondents agreed to use any one of the three officers. One general officer from the Army Materiel Command commented:

"I think any one of the above would meet the requirements. There would be other discriminators if I had to make the best choice amongst the three."

(See Comment 4, Q8)

The interesting point of the above comment is not that he would select any one of the three, but rather that he does not consider previous project management experience and success as a discriminator.

The highest level of agreement was to select the "problem solver and expediter". Statistically, it was picked only slightly ahead of the experienced project manager. However, twenty-two (50%) strongly agreed with selecting the

"problem solver and expediter" and eighteen (40%) strongly agreed to select the experienced project manager. One point, in analyzing these statistics, we must keep in mind that many of the respondents "strongly agreed" with all three of the choices. The responses were not mutually exclusive, nor were they intended to be so.

The strongest comment in favor of the "problem solver and expediter" came from an experienced project manager who stated:

"8c is the key. One can learn the techniques of Project Management."

(See Comment 2, Q8)

(NOTE: "8c" refers to the response indicating the "problem solver and expediter".

Another project manager drew a comparison between the experienced successful project manager and the "problem solver and expediter". He commented:

"Choice between a and c is difficult. We are looking for a proven new broom. I'd go with "c" and his reputation but admit I'd feel more comfortable if "c" had some PM office exposure."

(See Comment 1, Q8)

This preference for the "problem solver and expediter" confirms the findings of Giacoppe's study. Giacoppe's study sampled only project managers and their deputies, however, within this sample the respondents selected "ability to identify problems" as the most important criteria for successful performance in a project management office.

A general officer in the Army Materiel Command who had actually made selections such as those which I posed in my

questionnaire strongly agreed with both the selection of the experienced, successful project manager and the "problem solver and expediter". He further stated:

"I have done both of the indicated answers--both selectees performed outstandingly in turning their projects around. Again, I believe you select the man whom your analysis and evaluation say is the best man for the job. Either/both these courses of action offer the probability of success."

(See Comment 3, Q8)

The analysis of the sub-groups of the total population pointed up some interesting conclusions. The project managers who responded to the study agreed more strongly with the use of the "problem solver and expediter" than they did with the use of the experienced, successful project manager. Nine (81.8%) out of eleven respondents strongly agreed with the selection of the expediter, while only six (54.5%) out of eleven strongly agreed to the selection of the project manager. (See Annex D, Tab 2) However, one project manager did disagree with the selection of the "expediter" while none of the project managers disagreed with the selection of the experienced, successful project manager.

Possibly the response to this question should have precluded the "problem solver and expediter" from having previous experience of any kind in project management. It would be interesting to see if this would change the response at all.

Another interesting response came from a brigade commander. In his questionnaire he rejected the successful, experienced project manager as a choice, however, he strongly agreed with the selection of both the problem solver and the line commander. He added a clarifying comment which did not improve the situation for the project manager. He

stated:

"About this point the questions get very hard to answer in a general manner. I know QM and TC officers with background in Tech Svc who would be superb combat unit commanders & V/V (vice versa). I'd look for the 'doer'."

(See Comment 5, Q8)

Another brigade commander rejected both the experienced project manager and the successful line commander but strongly agreed with the selection of the "problem solver and expediter". He added the following comment:

"Management expertise and positive leadership are the key here. Anywhere he has demonstrated these qualities is enough. He will have technicians working for him to handle the "esoteric" aspects."

(See Comment 6, Q8)

I could not help but question why he did not see successful project management as "management expertise" or successful line command as "positive leadership". Either he has displayed some inconsistency in his answer or he was merely accentuating his preference for the "problem solver" by rejecting the other possible selections.

To summarize this chapter, one can draw some very interesting conclusions about the prerequisites necessary to be selected as a project manager. According to the respondents, as discussed earlier, a problem solver and expediter would have a slightly better chance of being selected as a project manager to straighten out a project which was in trouble. At a minimum, his chances would be just as good as that officer who has spent his time gaining experience and knowledge in the field of project management.

Based on the data and the discussion above, one can conclude that there is no real advantage or value to be gained by spending time in a project management career field. Current attitudes do not point in this direction in the minds of promotion boards, field commanders or project managers.

From this set of facts, a young officer aspiring to be a project manager because of his interest, might conclude:

"Why take a chance with 'command equivalent' positions in project management when I can command and later be selected as a project manager on an equal basis with the experienced project manager?"

This certainly is not conducive to retaining talented young officers in the project management field.

8. If you were responsible for selecting a new project manager to replace an unsuccessful project manager and correct deficiencies in the overall program, would you:

a. Select an officer in the project management career field who has demonstrated success in previous project management positions

1	0	2	7	17	18	45
Strongly Disagree			Strongly Agree			

b. Select a line officer who has demonstrated success in previous line assignments to include battalion command.

5	4	10	11	7	4	41
Strongly Disagree			Strongly Agree			

c. Select an officer who is a known "problem solver and expediter" regardless of previous experience.

0	1	1	7	13	22	44
Strongly Disagree			Strongly Agree			

COMMENTS:

## CHAPTER XI

MAJOR RESEARCH QUESTION EIGHT: "What type of experience is most important for a project manager?"

When drafting questions of this type which survey the experience that respondents feel is necessary for project managers, you tread on the brim of many pitfalls. Obviously, no list can be all inclusive; conversely, if you make the question a totally freeresponse type, there is a good chance that the data which is collected would be so varied in nature that no statistical significance could be drawn from the data.

The question was criticized for the former by a general officer serving in the Army Materiel Command. He stated:

"I am struck by the absence in your questions of emphasis on technical/logistical/procurement experience (e.g. I would also list experience in a laboratory, advanced degree in a hard science/business administration, logistical staff experience, contracting & procurement experience)."

(See Comment 12, Q9)

I agree that all of the experience listed in the comment above would be very helpful to a project manager. However, my intended comparison was to determine how the respondents would rank specific project management experience when compared in an array which also included assignments that are normally filled by all types of Army officers. In some ways, this question could confirm or

deny the findings of Chapter X.

The data was evaluated in two ways. First, the experience types were ranked according to the number of "ones" which they received. Second, the experience types were ranked by a weighted average of all the ratings which were given. The correlation between the two methods was very close. (See page 70.)

Utilizing the weighted average method, the order of listing was: (1) command experience; (2) as a manager of a small project office; (3) in a project office (Not the project manager); (4) operational experience; (5) general staff experience. In the ranking according to the number of ones which were received, the order was the same except that "operational experience" moved up to the third position and "in a project office, (Not the project manager)" dropped down to four. Based upon my analysis, I feel that the weighted average gives a truer picture of the relative order, since it includes five times more data points in establishing the relative ranking.

Again, we see command being placed ahead of project management experience for a project manager. This raises the question which I discussed earlier; is command being used as a mark of quality of the man, rather than a group of information and experience that will directly assist the officer in the managing of a project? When it is selected ahead of project management experience, it appears that it may be. Again, the "acid test" syndrome. It would be interesting to survey the experience which the respondents felt was necessary to command a battalion. I wonder if they would place "manager of a small project office" ahead of "company command"?

The command experience category was supported by a

comment which was added by a brigade commander. He stated:

"All are important as ingredients in the man's background. Experience emphasizing management, leadership, and working with people to solve problems are vital. Assignments which emphasize these qualities are key. A broad background is favored by me."

(See Comment 10, Q9)

There is a subtle indication throughout the respondents comments that a project manager does not "work with people". As referred to earlier in the paper, apparently the only true working with people is reserved for those times when you are commanding and are responsible for the troops twenty-four hours of the day. The project manager also has people problems.

A member of the lieutenant colonel promotion board felt that the problems of the project manager were less because of the quality of the people involved. He stated:

"In my opinion PM pos'n ranks higher than Div & Field Army, (staff) yet doesn't match the challenge of command because the PM has top quality pers(onnal) to work with at all times (or should come close to it.)"

(See Comment 11, Q3)

Another comment from a member of the lieutenant colonel promotion board also emphasized command experience. He stated:

"Project managers for combat items should have line, combat, command time from "hands on" level, to the level where such items are directed or controlled in the field. For technical and log items, a tech service oriented officer would be the best selection."

(See Comment 9, Q9)

The question is, "From what level are items of equipment directed in the field?" The platoon leader and the company commander probably do more actual directing of equipment than the battalion commander and higher. For purposes of training the project manager company command could meet the "hands on" requirement better than battalion command.

Basically, the ranking of experience in this chapter tends to support further the conclusions of Chapter X. Command experience is seen as important for the project manager.

9. Indicate the relative importance of each type of experience listed below for a project manager. (Use 1 for the most important and 5 for the least important.)

	BY ONE'S	WTD AVG
___ a. Operational experience. . . . .	3	4
___ b. In a project office. (Not the project manager)	4	3
___ c. Command experience. . . . .	1	1
___ d. As a manager of a small project office. . .	2	2
___ e. General staff experience. . . . .	5	5

COMMENTS:

## CHAPTER XII

### SUMMARY OF RESEARCH FINDINGS

So far in this study I have discussed each major research question individually, analyzing each question as it stands by itself. Obviously, there are major points which are supported by the entirety of the study. The question "Army Project Management-A Career Field?" still remains to be answered. This is the purpose of this chapter.

The first subconclusion of the study indicated that the respondents did not feel that the project managers should be selected from any one particular group of officers. This was discussed in some detail in Chapter IV as part of the analysis of major research question one. Some specific comments were listed in Chapter IV, however, some of the respondents made more general comments regarding this point. For example, a general officer from the Army Materiel Command stated:

"Branch is not a criteria in my opinion. Hardware experience is helpful, but proven performance is most important."

(See Comment 5, Q1)

The point was further strengthened by a statement made by a member of the lieutenant colonel promotion board. He

stated:

"I tend to believe that a line or technical service (emphasis added) officer of high overall competence can put together a talented team and hammer out a solution."

(See Comment 1, Q1)

The most succinct statement of the respondent population was made by another member of the lieutenant colonel promotion board. He merely stated:

"A good manager is a good manager."

(See Comment 7, Q1)

This then leaves the field wide open to any Army officer who is inclined towards, or interested in, project management.

In major research questions two and six, the respondents indicated very strongly that they did not favor the establishment of a specialized project management career field. In both questions they indicated that the officer who is involved in project management should return to his branch type assignments periodically. Not only did they indicate that the officer should return to his branch, but that he should remain branch qualified as well as commanding units within his branch at least through the battalion command level. This is a real challenge to the officer involved, to remain fully qualified in two very demanding fields. I will discuss this point further, later in the study.

Major research questions three and four discussed the comparative level of responsibilities of project management and command. This was done with both the rank of

colonel and lieutenant colonel. Here the respondents felt that the colonel project manager faced responsibilities equal to command of brigade level units. In fact, some indicated that the project manager's responsibilities exceeded those of brigade level command. However, the lieutenant colonel did not fare so well. Some equality was indicated, but when forced to make a one on one decision, the respondents indicated that they would select the commander over the project manager for promotion and senior service college selection. As stated earlier in Chapter VII many of the respondents indicated that this would be a difficult decision to make. This lesser level of equality for the lieutenant colonels is probably due to the fact that we do not currently have any project manager positions in the Army that call for a lieutenant colonel. Further, we have not established any credible positions within the project offices where lieutenant colonels can really get "command equivalent" credit. This is a very critical problem, and one which needs to be addressed.

Recently, a project manager who spoke to the student body of the Defense Systems Management School was questioned by me concerning this point. The colonel was a combat arms officer and had commanded a battalion in combat in Vietnam. My question was: "In view of the fact that there are currently no project manager positions in the Army which call for the rank of lieutenant colonel, which lieutenant colonel positions within your project office would you mark as 'command equivalent'?" He answered that he felt that none of his lieutenant colonel positions could be considered "command equivalent". During this questioning, another student asked further: "If you feel that none of your

lieutenant colonel positions are responsible, why don't you downgrade them to major's positions?"

The colonel stated that he felt that they were responsible positions worthy of the rank of lieutenant colonel, however, they were not the same as commanding. Again, we raise the point discussed earlier in the paper, of command being considered mainly as an "acid test" of the man rather than a collection of necessary experience required for successful project management.

Here we face a real dilemma. Promotion boards are currently being instructed that project management is a "command equivalent" position. For example, the instructions to the most recent lieutenant colonel promotion board stated:

"Command or command equivalent assignments (. . . .) especially in combat, contribute significantly to career development. Command at battalion or battalion equivalency is a major preparatory step in preparation for higher command positions. . . .

"The following assignments will be considered by the board to be equivalent to command duty:

. . . . .

(2) Project/product Managers" (4:50)

If there are no projects which call for a lieutenant colonel as the project manager, and currently there are no positions within the project offices which are considered "command equivalent" then it is virtually impossible for a lieutenant colonel who is working in project management to gain a command equivalency. The statement to the board becomes a useless comment.

Major research question seven was the most surprising of all of the points addressed. Here we found the respondents selecting the "problem solver and expediter", with no regard to his previous experience, over the successful, experienced project manager for the purposes of taking over and redirecting an unsuccessful project. This indicates that the respondents felt that project management experience was of little significance to the successful management of a program. One brigade commander went so far as to say this concerning project manager experience:

". . . .not necessary since may bring preconceived notions to job. We want an innovative creative leader!"

(See Comment 12, Q1)

It is interesting how previous project management experience becomes "preconceived notions" while company command experience is a prerequisite for battalion command, and battalion command likewise for brigade command. Regarding experience in a project office, one member of the colonel promotion board stated:

"Previous project management experience would be a 'nice to have' criteria."

(See Comment 9, Q2)

It appears that suddenly we have found a career field, or at least an area of endeavor, where experience is not required and in the minds of some it is undesirable, because it may create preconceived notions!

One member of the general officer promotion board saw project management as a passing fancy! He commented

as follows:

"As in most organizational/management doctrines & panaceas to such problems, the project manager concept will be overtaken by some new thought. I'm not sure what it will be but my guess is a new organizational element which will be designed to encourage a more participative style."

(See Comment 7, Q2)

To summarize this chapter, the most damaging comment concerning the "command equivalency" of project management came from a general officer who is currently a project manager. He stated:

"I personally feel that there is no such thing as 'command equivalent' however there is a great amount of 'staff equivalent' in the area of responsibility. This equivalent staff responsibility is particularly found in comparing PM and DA staff officers."

(See Comment 3, Q3)

Apparently the lack of troops is the differentiator between command and project management, since he speaks of equal responsibility. It is unfortunate that comparative fiscal responsibility is not considered.

If command equivalency is a figment of someone's imagination then there are really only two courses of action open to the officer in the project management career field. Either we must establish a total field of project management that has a credible progression chain to the highest positions of responsibility, or we must allow our project managers to stay with troop assignments until they complete all of the necessary command requirements, and accept them as less qualified and experienced in the field of project management. I will discuss

these possible career progressions further in the next chapter.

## CHAPTER XIII

### CAREER PROGRESSION ALTERNATIVES

As stated, and discussed earlier in this paper, the current feelings of the "corporate mind" towards project management is that the officer involved should stay current and qualified in his branch in addition to being a project manager. Since this is the current thinking of promotion boards, project managers, and senior commanders, it is the set of rules by which we are constrained.

With this in mind, I would first like to propose a career progression which would meet the current "corporate thinking" and like wise providing as much project management experience as possible.

First, let us look at the required positions to maintain an officer in his branch related progression. Under normal conditions, a project manager selectee must currently be a graduate of one of the senior service colleges. Through a normal branch related progression, selection for a senior service college requires a tour on the Department of the Army staff and a successful tour as a battalion commander. In order to command a battalion an officer must be a graduate of the Command and General Staff College and also must have displayed command potential at the company level. In order to command a company, the young officer must also be a graduate of the appropriate branch career course. And finally, selection for the branch career course is based

on displayed leadership ability at the platoon level, plus some time on a battalion staff. Listing these jobs together, we find that the following are a career "must" for successful progression through a normal branch.

- (1) Troop duty at lieutenant level.
- (2) Branch career course.
- (3) Company command.
- (4) Command and General Staff College.
- (5) Department of the Army Staff.
- (6) Battalion Command.
- (7) Senior Service College.

Using the above list of positions as a "must", we can now fill out a normal career progression to include those assignments where the officer will gain experience in the fields necessary for successful management of a project.

Since the project manager is dealing on an everyday basis with engineers, accountants, and business managers, it would be necessary to add graduate schooling in one of the related sciences. This is also one of the selection requirements for a project manager. For purposes of this analysis I will refer to this as advanced schooling.

Initially, the lieutenant would spend his first four years in branch related troop duty. The first year would account for his branch related basic course plus the normal schools such as jump school, Ranger school, etc. This four years plus the listed schools would be necessary to make him competitive with his peers for selection to the career course and later company command. The career course would take one year and then he would be selected for company command. Under current informal practices, he would spend a few months in the troop command competing for the right to command a company. This competition added to the year

in command would take about two year of his career.

Upon completion of his company command tour, the officer should be sent to advanced schooling to give him the additional expertise required to function in a project management position. Further, current Army policy encourages lieutenant colonels to have a graduate degree. In view of the tight timing necessary to qualify the officer both in his branch and prepare him for the project management position, this is the best time to send him to graduate schooling. The advanced schooling would take two years.

Upon completion of his advanced schooling the officer would be assigned to a utilization tour. This would be in one of the functional commands of the Army Materiel Command. Also, this assignment would be branch related; i.e., an Armor officer to the Tank Automotive Command, a Signal Corps officer to the Electronics Command, etc.

Upon completion of his tour in a functional command, the officer should be selected for attendance at the Command and General Staff College. Hopefully, his lack of troop experience upon completion of company command would not cause a delay in this selection.

After one year at Fort Leavenworth, the officer would be assigned to the Department of the Army Staff. Here, for the best training, he should be assigned to the Chief of Research and Development for a three year tour. An alternative would be as a DASSO in the Office of the Assistant Chief of Staff for Force Development or a similar position in other departments.

Upon completion of his tour on the Department of the Army staff, he would be selected for battalion command. The command time would be eighteen months, and under current practice an added six months of "waiting in line" would take a total of two years.

Finally, upon completion of the battalion command, he would be selected for attendance at one of the senior service colleges. The appropriate one would be the Industrial College of the Armed Forces. This would take an additional year. For ease of discussion, I will summarize the above positions in table form.

PROGRESSION PROPOSAL I

<u>Rank</u>	<u>Duty</u>	<u>Years</u>	<u>Cumulative Years</u>
LT	Branch Troop Duty	4	4
CPT	Career Course	1	5
	Company Command	2	7
	Advanced Degree	2	9
MAJ	Functional Command	2*	11
	(AMC) Command and General Staff College	1	12
	Department of the Army Staff (R & D)	3*	15
LTC	Battalion Command	2	17
	Senior Service College	1	18
	Project management Office (Section)	1*	19
COL	Project Manager	1	20

\* Project management related.

From the above table, we can see that the officer has a total of six years experience in project management related positions, prior to assuming the position of project manager. However, he has spent eight years in positions that prepare him for the job of brigade commander. We have kept him qualified in his branch, but at the expense of extensive experience in project management related fields. Also, there are other considerations. This scheme

assumes that he will be selected for each position at exactly the right time for the progression indicated. However, suppose that for the needs of the service, he must wait an extra year to get his company. Suppose that a division commander decides to keep him an extra year to function as a principal division staff officer. This is a career enhancing position for the commander, but, it does little to prepare him for project management and reduces his experience level in related fields. At a minimum, we would need some personnel office to monitor his career to assure assignment to the listed positions as soon as possible. This establishes a need for a project management career field in the same sense of current specialties.

To maintain an officer's qualifications within his branch, but still giving him increased experience in project management related activities, the above career pattern can be modified somewhat. First, we reduce the troop duty at the rank of lieutenant to two years and use the other two years to get the officer an advanced degree. An additional two years is added at the rank of captain for a tour in project management. In place of the Command and General Staff College, we substitute the Program Management Course at the Defense Systems Management School. Further, to gain some lead-in to troop duty after an absence, the battalion command tour is preceded by two years on Test and Evaluation, Operational Testing. In table form, the above pattern is as shown on the next page.

PROGRESSION PROPOSAL II

<u>Rank</u>	<u>Duty</u>	<u>Years</u>	<u>Cumulative Years</u>
LT	Branch Troop Duty	2	2
	Advanced Degree	2	4
	Career Course	1	5
CPT	Company Command	2	7
	Functional Command (AMC)	2*	9
	Project Management Office (Branch Related)	2*	11
MAJ	Defense Systems Mgt. Sch. (Replaces C&GSC)	$\frac{1}{2}$	$11\frac{1}{2}$
	Department of the Army Staff (R & D)	$2\frac{1}{2}$ *	14
	Test and Evaluation (Operational Testing)	2*	16
LTC	Battalion Command	2	18
	Industrial College of the Armed Forces	1	19
COL	Project Manager	1	20

\* Project management related.

The above option gives a total of eight and a half years of experience prior to assuming the position of project manager. It has one disadvantage of little troop duty at the lieutenant level. This could affect the officer's ability to command well at the company level. This then, would affect the remainder of the progression. Further, his lack of troop duty may cause some division commanders to reject him as a battalion commander. I know of cases where very competent officers who had, had company command and were command recommended by their branch, were not accepted by division commanders due to their lack of troop duty. Again, a project management personnel career field

could solve the problems of career progression, as discussed earlier.

My third proposal is a true, complete career field in project management. In order for it to be successful would require acceptance at the highest levels of the Army command and also a close management of the career field to assure attendance at senior service colleges and selection for promotion based on performance of duty in the project management field as opposed to competing with those officers in troop command. The table is listed below.

PROGRESSION PROPOSAL III

<u>Rank</u>	<u>Duty</u>	<u>Years</u>	<u>Cumulative Years</u>
LT	Branch Troop Duty	2	2
	Advanced Degree	2	4
	Functional Command (AMC)	3*	7
CPT	Career Course	1	8
	Company Command	2	10
	Procurement (AMC or DCAS)	3*	13
MAJ	Defense Systems Mgt. Sch. (Replaces C&GS)	$\frac{1}{2}$	$13\frac{1}{2}$
	Project Office (Section Chief)	$2\frac{1}{2}$ *	16
	Department of the Army Staff (R & D)	3*	19
LTC	Industrial College of the Armed Forces	1	20
COL	Project Manager		

\* Project management related.

In this proposal, the officer spends eleven and a half years in project management related fields prior to assuming the position of project manager. He has

maintained touch with his branch through company command where the user problems are most apparent and likewise the career course is branch related. He is given battalion command credit for the section chief position in the project office and attends the Industrial College of the Armed Forces. In this case promotion and senior service college selection boards would be instructed in the selecting of project managers based on their experience in that field.

All of the above career progression alternatives are workable solutions to the project management career field. However, in each alternative mentioned, the progression is so tightly scheduled that a personnel management office would be necessary to assure that the officer performs in the required positions at the proper time.

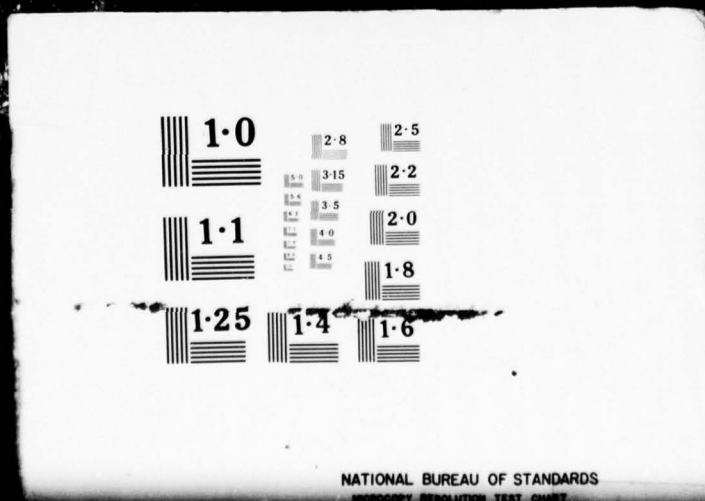
Further, although I feel that the third alternative is the best one for good project management, it is not acceptable to the senior officers of today's Army. Before we can institute alternative three, we must first conduct a very widespread education program to portray to the officers of the Army, especially at the high level, what the responsibilities of Army project management really are. Only when we are able to cut project management free from the command requirement will we really be able to provide project managers who have "grown up" in the business.

This is the real dilemma of the project management career area. However, as my survey indicated, the current senior officers of the Army would prefer a project manager with a line/command background to a project manager with previous experience in a project management/acquisition related position. This is unfortunate because an experienced project manager can do much to assure low cost, on schedule delivery, and a desired level of equipment performance.



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NATIONAL BUREAU OF STANDARDS  
PHOTOCOPY RESOLUTION TEST CHART

We must remember that the fighting soldier is paramount. However, we must never forget that the greatest fighting man in the world can be limited by sloppy or ineffective equipment. This is where the experienced project manager can do his part--to run a program which is on cost, on schedule, and meets the required specifications. This is the goal of each project manager, and likewise the need of every front line fighting man. To provide him less would be negligent.

## CHAPTER XIV

### CONCLUSIONS

The primary task of establishing a project management career field is clear; first, we must convince the senior officers of the Army of the great responsibilities facing a project manager. This is no small task; it borders on changing tradition, or at least preconceived ideas that are based on tradition. We must demonstrate to these senior officers that the responsibilities of certain lieutenant colonel positions within a project office require decisiveness, demand competence, and cry out for experience in the same manner as the position of battalion commander.

Successful combat requires professionally led troops and the employment of adequate, superior weapons. Command experience at each level provides the professional leader. The competent project manager who can provide the adequate, superior weapons likewise requires project management experience at each level.

Modern warfare has not only compounded the problems of the field commander, but it also has increased the complexity and cost of the necessary weapons. We cannot afford to neglect the experience of the combat leader or the project manager in favor of tradition. Both disciplines require the greatest amount of study and experience that can be provided to an officer in the time of one career. There is not time to do both in a superior manner!

Based upon the findings of my study, there currently

is no real project management career field in the Army. There are specialties in related fields, i.e., Research and Development, Procurement, Logistics, and Maintenance Management, however all of these specialties relate to the functional areas that support the activities of a project manager.

The project manager is a "generalist" in the area of weapons acquisition. He ties the above specialties together to produce the system for which he is responsible. As discussed in Chapter XIII, an officer's career progression requires a very efficient use of his time to assure that he stays current in his branch as well as being knowledgeable in the responsibilities of project management. This limited amount of time does not permit career development of two specialties other than project management, i.e., command and one other.

Currently, the best way for an officer to become a project manager is to follow a normal career progression of his branch through attendance at a senior service college. As indicated in career progression proposal one, by proper selection of branch immaterial assignments he could gain some experience that would be helpful to him as a project manager. However, he would have more experience that would be useful to him as brigade commander. This does not utilize experience to the best advantage when we spend a great deal of time preparing an officer for brigade command when his interest lies in project management. However, the attitudes of the Army of today (as supported by my research) demand this sort of a career pattern.

Current practices and requirements provide prima facie evidence for the need of competent, experienced project managers; the positions are already established

through general officer level.

Further support for experienced, competent project managers is displayed at the highest levels of the Department of Defense. This was demonstrated in a statement made by Secretary Clements in an address to the student body of the Defense Systems Management School. He stated:

"Secretary Schlesinger and I strongly support the concept that highly competent program managers are essential to an effective Defense Systems Acquisition process."

In closing, I can only say, "The choice is clear; will we make it?"

## BIBLIOGRAPHY

1. U.S. Government; DoD Directive No. 5000.1; Acquisition of Major Defense Systems, Washington, D.C., 13 July 1971.
2. U.S. Government; Blue Ribbon Defense Panel; Report to the President and the Secretary of Defense on the Department of Defense, Washington, D.C., July, 1970.
3. Hall, Jay et al; Styles of Management Inventory, Telemetrics International; Conroe, Texas, 1973.  
(No page numbers)
4. U.S. Government; Circular No. 624-40; Department of the Army; Recommended Lists for Temporary Promotion to Lieutenant Colonel, Army, Chaplain, Women's Army Corps and Army Medical Department; Washington, D.C., 16 April 1973.
5. Siegel, Sidney. Nonparametric Statistics for the Behavioral Sciences. New York: McGraw-Hill Book Company, 1956.
6. Giacoppe, George N. The DoD Program Manager Profile. Unpublished thesis, Defense Systems Management School; Fort Belvoir, Va.; 1973.

ANNEX A

Respondent Comments

QUESTION ONE (Q1) RESPONDENT COMMENTS

1. PM--Matching individual to the job is the most essential element. Also--status of program is a key consideration, i.e. Validation/Development vs production.

2. PM--A project manager must be first of all a manager. Arms or technical service affiliations are secondary and serve only to retain "the real world" flavor. A battalion commander has passed a major test of his ability to manage. Successful commanders are retainable. Pick one with a management degree.

3. PM--Choose individual on basis of his proven technical (mgmt/command background. Interview him--have senior boss (AMC cmdr) do this. Look at the man and his qualifications--If you need an aviator with logistics background--then get an aviator with log. background--or with most experience.

4. PM--Project Management has to be more than a passing job. People in this business must be development oriented. It helps if you are a line officer with the right background for items to be used by the combat arms.

5. AMC--Branch is not a criteria in my opinion. Hardware experience is helpful, but proven performance is most important.

6. AMC--I think PM's should come from Tech Svc people who have experience in their commodity/weapons systems area--Engr, Proc, R&D, Support combined--Bn cmd doesn't impress me. (NOTE: Had commanded a battalion--QM)

QUESTION ONE

7. LTCPB--A good manager is a good manager.

8. LTCPB--I tend to believe that a line or technical service officer of high overall competence can put together a talented team and hammer out a solution.

9. COLPB--He needs technical and managerial competence more than troop experience.

He should stay at least 4 years in the job unless he is fired.

10. BC--Too many "ifs" to answer this question definitely. I know several outstanding combat arms commanders I wouldn't want within 1000 miles of a Project Manager and vice versa. Depends too much on the guys brains, common sense, and talent for listening to people who do have appropriate experience.

11. BC--REF A-But given assistants and action officers who are specialists.

My response will vary over a broad scale depending on item. For example: UTTAS - a line officer, command oriented. COFRAM ORD - a specialist might do better job.

12. BC--e precludes a and b in my view. ref d: not necessary since may bring preconceived notions to job. We want an innovative creative leader!

13. BC--The whole point of the above answer is that it should not be stereotyped. He should have been a bn. commander and in most cases should be a combat arms officer. There is no one answer.

QUESTION TWO (Q2)

1. PM--Resp. B - If we have a field, it must provide for GO opportunity. However, it (the career field) must be purely voluntary in OPMS set-up, and provide flexibility for cmd of troop units thru Bn level at least.
2. PM(G)--At this time specialization works to the disadvantage of an officer. I feel that the PM can best be selected from "generalists" who have management degrees or experience. For projects in the early stages the PM could be chosen from the R&D career field-toward the end of development either the Procurement or the Logistics field have a wealth of experienced managers.
3. PM(G)--Resp. A - (Changed from S. Disagree to S Agree) (Reason for changing my 1st choice) If a career field can be designed to ensure PM officers remain competitive with contemporaries at boards (promotion, command, schools, high level staff) than establish a separate career field. I am concerned that we may develop a career field with officers being further separated from "mainstream" Army career enhancement assignments.
4. PM--Preponderance should be tech svc officers with a smaller percentage of combat/support officers.  
(combat arms)
5. PM(MS)--One must be careful of a PM career field. With reduction in projects, numbers and size the opportunities for advancement to PM are very small. Also a PM must not lose touch with the user in the field.
6. GOPB--I really don't know enough to comment on this.

QUESTION TWO (Q2)

7. GOPB--As in most organizational/management doctrines and panaceas to such problems, the project manager concept will be overtaken by some new thought. I'm not sure what it will be but my guess is a new organizational element which will be designed to encourage a more participative style. That's my fundamental reason behind the answer in 2a above.

8. AMC--We don't need a PM career field. Need officers of varied backgrounds and some functional expertise to bring to bear on weapons acquisition.

9. COLPB--Previous project management office experience would be a "nice to have" criteria.

10. COLPB--There's need for a mix of backgrounds-project manager jobs/needs vary. In any case, technical preparation/experience/schooling is requisite. If troop experience can be added to that, so much the better.

11. BC--(Answered a-strongly disagree) Answer to a precludes b,c,d. PM functions should tie in closely w/combat developments doctrine organization. "Sterilization" of officers in a vertically oriented career field in project management does not foster this.

QUESTION THREE )Q3)

1. PM--The ability to "command" does not necessarily translate (in-a-straight-line) to ability to "Project Manage!"
2. PM--Resp. B - While difficult to assess since programs vary in size, scope, responsibility demands, for the combat arms officer it will rarely match Bde responsibilities- probably never in the eyes of selection boards in our time.
3. PM(G)--I personally feel that there is no such thing as "command equivalent" however, there is a great amount of "staff equivalent" in the area of responsibility. This equivalent staff responsibility is particularly found in comparing PM and DA staff officers.
4. PM--PM responsibilities exceed those of division or Corps/FA staff positions.
5. PM(G)--All of the above. There is too much at stake in wps systems acquisition-need the best quality personnel- can't get them if there is no effective reward system-promotion, schools, etc.
6. GOPB--It's a tough challenging and satisfying experience worthy of the highest equivalency positions.
7. GOPB--I don't know enough to comment with credibility.
8. AMC--Have selected 3b only because it is most nearly descriptive. Actually, I think many PM jobs require more responsibility than the average Bde command. Length of tour is very important in this connection.

QUESTION THREE (Q3)

9. AMC--PM is command by current definition. Therefore it does not correlate with staff.

10. LTCPB--Certainly PM responsibility exceeds division, corps and field Army staff positions in complexity, etc. Frequently exceeds Bde C.O. and DA staff level also.

11. LTCPB--In my opinion PM pos'n ranks higher than Div. and Field Army, yet doesn't match the challenge of command because the PM has top quality pers to work with at all times (or should come close to it.)

12. COLPB--Command under some circumstances is tougher and not analogous.

Certain DA and higher staff assignments are tougher than anything else.

13. COLPB--My answers are based on my experience. One should evaluate each project manager's job including how much responsibility he is, in fact, given.

14. BC--REF B - Yes from point of view of promotion and school selection boards. But given a 2-star general to be selected for division command, all else equal, I'd probably opt for the fellow who had a healthy dose of Bde command over the fellow who had been a Pm only.

15. BC--REF A - It is for the PM but not his action officer.

16. BC--(Answered b-Strongly Agree) - Answer to b says it all PM should be command credit!

QUESTION FOUR (Q4)

1. PM--Resp C-The line officer with OP's background has a great deal of difficulty learning "the jargon"---"the patterns of behavior.
2. PM(G)--While the PM has many of the same responsibilities as a commander he does not have the 24 hour a day responsibility for the discipline, welfare, and leadership of the Army soldier. The successful battalion co. has passed this acid test and has a greater overall value.
3. PM--The program manager is forced to perform as an individual more than is a Bn. Cdr. He has to think more on his own initiative-is exposed (more visibility) than Bn. Cdr.-Congress, OSD, DA, AMC, (            ), Navy, AF, USMC, Cnds.
4. PM--A LTC must prove himself as a bn C.O. prior to making COL both tech svc and line. Also true of COL to General Officer.
5. PM--Should be considered with equivalents. Almost all PM's are senior COL's.
6. GOPB--This is not too relevant because promotion boards receive guidance on what specialties are needed and don't compare Bn command with project management experience. Each competes within his own experience field.
7. GOPb--re 4c and d above; quality is nebulous. We promote on potential based on past performance. I agree that potential is nebulous too and we miss the mark occassionally but overall the Army's leadership at all ranks/grades is good.

QUESTION FOUR (Q4)

8. AMC--None-I would not even compare a PM with a battalion commander. I might compare him to Bde or Div Arty commanders.

In my judgement you are setting your sights too low w/ this question. It should be eliminated.

9. AMC--I would compare performance wherever it occurs, not job.

10. AMC--Bn Co are equal to PM (05) and vice versa. Both would be selected. A program manager does NOT get credit for command under today's rules.

11. LTCPB--As a general rule I would tend to select the PM over the commander of equivalent grade. Fortunately this kind of dilemma only occurs in the abstract.

12. LTCPB--This is a tough one. Needless to say the total record is considered when making selections. Degree of responsibility associated with assignments is key. As with the Advisor Program in RVN, it is difficult to relate or equate between management and command as to degree of responsibility. Unless the gray area is defined. People who stay to(o) long in the PM business may suffer.

13. COLPB--Resp D - (middle agree) - This presupposes that program management time does not equate to battalion command time.

14. COLPB--Good program managers are rarer than good battalion commanders.

QUESTION FOUR (Q4)

15. COLPB--Tech svc program manager's task often much more difficult than command of a small tech svc battalion.

16. COLPB--Same comments as Q3-13.

17. BC--Depending on the size of the project, may even be considered "equal" to higher line command.

QUESTION FIVE (Q5)

1. PM--AMC needs both types of GO's but line O's should have ~~P~~e. talents as a rule. Exceptions are, of course, justified.

2. PM(G)--G.O. Positions should be filled by the best talent available without reference to line or service background. I consider this true in the PM area but recognize that AMC logisticians, by virtue of experience, may be predominantly filled from technical service backgrounds.

3. PM(G)--Takes both, but tech services should hold the key positions-not all. Need flavor of some arms officers in AMC.

4. PM--Combat Arms officers mainly do fill Bdes/Divs/Corps/Army positions with tech svc officers in certain related key positions. This concept should mainly apply for tech svc officers in AMC.

5. PM(MS)--The word mainly is the operative word. The command needs to be filled with the best qualified personnel both line and tech service. However, because of the technical nature of AMC the majority of General Officers would probably be technical.

6. AMC--General Officers, like any other responsible position should be filled with the best qualified officers available. They should be selected on basis of proven performance, background, training and experience. A mix of line and tech svc background is as important as a mix of acquisition and logistics training and experience.

QUESTION FIVE (Q5)

7. AMC--There are some jobs that anyone can fill, Compt, Personnel, Chief of Staff,-fundamentally though I favor Tech svc officers in all other jobs.

8. LTCPB--A mix is the best solution, line and tech service; line with acquisition background; tech service with an operational background; there are enough of both types.

QUESTION SIX (Q6)

1. PM--Assuming grade of LTC. The equal PM will be at a disadvantage. He must demonstrate a plus factor based on broader experience/talents to win. What you are weighing is opportunity-not demonstrated performance.
2. PM--See 4 - 2.
3. PM(MS)--Should be considered with equivalentents. Almost all PM's are senior COL's.
4. AMC--Same comment as question 4 - Eliminate (see 4-8)
5. AMC--It's more how he performed rather than what he did- assuming he had a responsible job.
6. AMC--Re c & d: Again, quality of performance being equal, I would look to type of assignments in which the quality was equal. My answers above project a slight bias which is not proper. Your form provides no means of equality (which I understand). I would not make my decision solely on PM vs Bn Cdr, but on the "whole man" concept.
7. LTCPB--I would tend to select the PM over the Bn Cdr in all cases-given that unhappy dilemma. I know of no PM job that was not greater in scope-complexity than Bn Cmd by a factor of 3-5 times.
8. COLPB--Resp E-Tougher to be a manager than CO of many tech svc battalions.
9. COLPB--The board should be given quotas so that this problem/question doesn't arise.

QUESTION SEVEN (Q7)

1. PM--There has to be cmd opportunities open for the successful competitors. Too narrow a pattern will result in rejection by many who you would most want as PM's in senior grades.

2. PM(G)--I reject the idea of "isolated specialization". I believe that the officer and the Army will both benefit from "Army associated" tours such as troop duty, support operation and staff in the traditional sense with "Specialization" in no more than 30% of a career pattern.

3. PM(G)--Must keep them competitive; i.e. don't keep them in PM too long-many years continuously.

PM--Still need some branch material asmgt's after making major esp. true for line officers but also for tech svc (maybe every 3d asmgt).

4. PM(MS)--Resp D-The Deputy PM has traditionally been a civil servant. This is good since it provides continuity between PM's out over a long time span and it balances the headshed, since most of the staff are civilian.

5. GOPB--I really don't know.

6. GOPB--I agree with the OPMS concept. We need specialist but the best opportunities/challenges are dealing with people and their problems.

7.\* AMC--No answer-do not agree that a PM career field should or will-be established.

8. AMC--Project management is not so specialized that one would make it equal to a professional career such as that of an M.D. In fact I think an elite group as posed in this array would be detrimental to top notch PM programs.

QUESTION SEVEN (Q7)

9. LTCPD--Resp. E - Too early.

10. BC--Ref C - But not as PMO except in rare cases.  
(see Q #1) (Q1-11)

11. BC--See my comments in 2 (above) my perceptions about  
this are influenced as noted in 2. (Note: See Q2-11).

QUESTION EIGHT (Q8)

1. PM--Choice between a and c is difficult. We are looking for a proven new broom. I'd go with "c" and his reputation but admit I'd feel more comfortable if "c" had some PM office exposure.

2. PM--8c is the key. One can learn the techniques of Project Management.

3. AMC--I have done both of the indicated answers- (a&c, strongly agree) both selectees performed outstandingly in turning their projects around. Again, I believe you select the man whom your analysis and evaluation say is the best man for the job. Either/both these courses of action offer the probability of success.

4. AMC--I think any one of the above would meet the requirements. There would be other discriminators if I had to make a the best choice among the three.

5. BC--About this point the questions get very hard to answer in a general manner. I know QM & TC officers with background in Tech Svc who would be superb combat unit commander & V/V. I'd would look for the "doer".

6. BC--Management expertise and positive leadership are the key here. Anywhere he has demonstrated these qualities is enough. He will have technicians working for him to handle the "esoteric" aspects.

QUESTION NINE (Q9)

1. PM--A difficult ranking since all contribute. While GS experience is rated lowest the knowledge of how policy is made-who the key people are-and how to get your program accepted should never be given a low priority in selection.

2. PM(G)--I chose "d" as the man who had done it all, even if on a small scale. I equated "e" as Army GS level. This staff level compares most closely to the staff relationships to which a PM is exposed. This would be my second choice if I couldn't get "d". PM office experience, if not PM of project, or deputy PM, would normally be too narrow to put ahead of command, operational or general staff experience.

3. PM(SC)--I must report I am clearly biased by my experience in that I have had a full 6 years of previous experience in the PM environment before this tour-as a captain, major and LTC.

Command experience does not per se, equip an officer for PM assignment. It helps but clearly is not essential.

4. PM(G)--Obviously all are needed/desired + need operational experience-early in career.

5. PM(MS)--I don't believe that there is any set pattern to experience required. It depends on the project, its life cycle and the interests of the PM.

6. GOPB--I don't know. I would really want a proven good man with experience in the appropriate field.

QUESTION NINE (Q9)

7. AMC--Want self starting performers as PM's.

8. LTCPB--This is a nebulous area which requires case by case resolution. We cannot stereo-type people into neat packages. Good luck to you. I like the guy that does his homework and performs effectively in any role.

9. LTCPB--Project managers for combat items should have line, combat, command time from "hands on" level, to the level where such items are directed or controlled in the field.

For technical and log items, a tech service oriented officer would be the best selection.

You didn't define the nature of the projects vis-a-vis their selection criteria.

10. BC--All are important as ingredients in the man's background. Experience emphasizing management, leadership, and working with people to solve problems are vital. Assignments which emphasize these qualities are key. A broad background is favored by me.

11. BC--If there is one thing the Army does not need more of, it is specialists.

WHOLE QUESTIONNAIRE - COMMENTS

GOPB---I do not believe the correlation between command experience and Project Manager responsibilities are so pertinent as the questions might suggest. I personally feel this inquiry could therefore lead to misleading conclusions.

BC--See questionnaire marked "long comment".

ANNEX B

Letter of Information



DEPARTMENT OF DEFENSE  
DEFENSE SYSTEMS MANAGEMENT SCHOOL  
FORT BELVOIR, VIRGINIA 22060

4 October 1973

Lieutenant Colonel Jerry H. Huff

(MY FILE COPY)

Dear Sir:

Currently I am enrolled in the Project Manager's Course in preparation for my assignment to the Office of the Project Manager, XM 1 Tank System. One major requirement for completion of this course is the conduct of research.

For my particular research project I have selected the topic "Army Project Management--A Career Field?". This area of study is of more than passing academic interest to me. Recent Army actions to establish the Officer Personnel Management System coupled with increased Congressional interest in the management of materiel acquisition have cast Army Project Management in a new arena.

This letter is a request for a few minutes of your time to assist me in completing a survey as a portion of my research. Although the questionnaire contains only 9 questions, your candid responses and comments will assist me greatly in determining current attitudes and feelings toward project management in particular and career progressions in general.

Since the Defense Systems Management School maintains a very strict non-attribution policy, you will note that the questionnaire asks for no data which could identify you as the respondent. The pre-marked category code merely allows me to identify the general category of the response, i.e., general officer promotion board (GOPB), program manager (PM), brigade commander (BC) etc. The total sample population includes recent promotion board members, program managers, brigade commanders, and selected officers of the Army Materiel Command.

A self-addressed envelope has been enclosed for your convenience. I would appreciate greatly any efforts on your part which would expedite the return of the completed questionnaire.

Sincerely yours,

JERRY H. HUFF  
LTC     Armor

ANNEX C

Total Data Questionnaire

SUBJECT: Army Project Management--A Career Field?

58 SENT

General Information:

Category: ALL

1. Which best characterizes your overall Army career?

48 RETURNED

1 a. Command/Operational 10, 5, 6, 1, 4, 5 - (31)

1 b. Command/Technical (i.e., Technical Service) 2, 6, 2, 6 - (16)

1 c. Staff/Technical 1, (1)

1 d. Other (List): \_\_\_\_\_

2. What is your branch of service? \_\_\_\_\_

3. Have you served or are you serving in a defense acquisition/procurement related position?

(28) Yes 3, 3, 3, 7, 1 (20) No 7, 4, 4, 5

4. Have you served or are you serving in a project management office?

(14) Yes 1, 2, 11 (34) No 10, 6, 7, 5, 6

5. Are you familiar with DoD Directive 5000.1 ?

(18) <sup>1, 1, 7, 1, 8</sup> Totally familiar. (16) <sup>5, 3, 5, 3</sup> Aware of subject matter.

(14) <sup>4, 3, 2, 5</sup> Not aware of this directive.

6. Have you commanded a battalion?

(46) Yes 10, 7, 6, 7 (2) No 1, 1.

7. Have you attended a senior service college?

(47) Yes (1) No 1

<sup>6, 10</sup>  
10, 7, 7, 7, 6, 10

GENERAL INSTRUCTIONS: Each question on the pages that follow (with the exception of question 9) contains a response block where you may indicate your level of agreement or disagreement with the question asked. Please indicate your selected response with an "X" in the appropriate block.

1. Project managers should be:

a. Selected from line officers (i.e., combat arms) for assignment between branch material assignments.

44  
4,6,6,6  
6,11

2,1 ③	1,1,2,1,1 ⑥	3,2,1,2 ⑧	1,1,1,2,2 ⑧	2,2,1,1,1 ⑦	2,3,6 ⑪
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Strongly Agree

1

Strongly Disagree

b. Selected from technical service corps officers with a weapons acquisition or procurement background.

44  
4,6,6,6  
6,11

1,1,1,2 ⑤	3,2,1,1,3 ⑫	3,1,2,1,5 ⑫	1,1,1,2,2 ⑦	2,2,1 ⑤	1,1,1 ③
--------------	----------------	----------------	----------------	------------	------------

Strongly Agree

Strongly Disagree

c. Selected from officers who have completed battalion command.

44  
4,6,6,6  
6,11

4,1,2,1,1 ⑪	2,1,2,1,3 ⑨	2,2,2,1 ⑬	1,1,1,1 ④	1 ①	1,2,2 ⑤
----------------	----------------	--------------	--------------	--------	------------

Strongly Agree

1

Strongly Disagree

d. Selected from line officers with previous project management office experience.

44  
4,6,6,6  
6,11

2,1,1,2 ⑥	1,1,3,1,2 ⑧	4,2,2,1 ⑬	2,1,2,2 ⑦	2,1,1,2 ⑥	1,1 ②
--------------	----------------	--------------	--------------	--------------	----------

Strongly Agree

2

Strongly Disagree

e. Selected from either line or technical service depending upon the specialized needs of the particular weapons acquisition program.

46  
4,6,6,7  
6,11

3,5,3,5,4 ⑧	2,2,2,2 ⑪	2,1,1 ④	1 ①	1 ①	1 ①
----------------	--------------	------------	--------	--------	--------

Strongly Agree

Strongly Disagree

COMMENTS:

2. A project management officer career field:

(45)

9, 7, 6, 7  
+ 11

a. Should be established within the Army.

2, (2)	2, 3, 2, 1 3 (11)	1, 3, 2, 2 2 (10)	1, 1, 2 (4)	3, 3, 1, 2 (9)	4, 2, 1, 2 (9)
Strongly Agree					Strongly Disagree

(42)

9, 6, 6, 6  
+ 11

b. Should include possible career progression within the field to general officer level.

1, 1, 1, 5 (8)	2, 3, 2, 1 1, 3 (12)	2, 2, 2, 1 (7)	2, 2, 1, 1 (6)	2 (2)	4, 1, 2 (7)
Strongly Agree					Strongly Disagree

(42)

9, 6, 6, 6  
+ 11

c. Should include only technical service corps officers.

	1, 1 (2)	1, 1 (2)	1 (1)	4, 4, 1, 1, 3 (13)	7, 2, 2, 4, 2 7 (24)
Strongly Agree					Strongly Disagree

(42)

9, 6, 6, 6  
+ 11

d. Should include only line officers with branch material assignments through the rank of captain.

	1 (1)	1, 1, 1 (3)	2, 1 (3)	1, 2, 3, 1 2 (9)	4, 4, 2, 5, 2 9 (26)
Strongly Agree					Strongly Disagree

COMMENTS:

3. Project manager experience is equal in responsibility to:

42  
6,6,5  
5,11

a. Rank equivalent DA staff positions.

1,1 2	1,1 1	2,1,2 5		1,2,5,2 10	5,3,1,4,1 24
----------	----------	------------	--	---------------	-----------------

Strongly Disagree Strongly Agree

43  
6,6,6  
1,11

b. Rank equivalent command. (e.g., COL PM equal Bde CO)

3,1 4	2,1,1,1,1 6	2,1,1 4	1,2,1,1 5	1,2,2,2 7	1,3,1,4 8 17
----------	----------------	------------	--------------	--------------	--------------------

Strongly Disagree Strongly Agree

41  
6,6,5  
1,11

c. Rank equivalent principal division staff positions.

1,1 2	2,2,1 5	1,1,1,1 4	2,1,1 4	1,3,1,3 8	3,4,4,2 5 18
----------	------------	--------------	------------	--------------	--------------------

Strongly Disagree Strongly Agree

41  
6,6,5  
4,11

d. Rank equivalent corps or field army staff positions.

1,1 2	1,1,1 3	1,1,1,1 4	2,1,1 4	2,3,1,2 8	3,4,4,2 7 20
----------	------------	--------------	------------	--------------	--------------------

Strongly Disagree Strongly Agree

COMMENTS:

4. As a member of a promotion selection board, if the quality of performance of two officers was otherwise equal, you would:

42  
17, 6, 6, 6  
3, 11

a. Consider the project manager equal to the battalion commander.

1, 5, 5, 1 5 (17)	2, 1, 1 (4)	1, 2, 1, 1 (5)	4, 2, 2, 1 (9)	1, 1, 1, 1 (4)	1, 2 (3)
----------------------	----------------	-------------------	-------------------	-------------------	----------

Strongly Agree Strongly Disagree

42  
9, 6, 6, 6  
7, 11

b. Consider a technical service program manager equal to a line battalion commander.

4, 4, 1, 4 (13)	3, 1, 1, 3 (8)	1, 2, 2 (5)	1, 2 (3)	2, 1, 1, 1 (5)	3, 1, 1, 1, 1 (7)
--------------------	-------------------	----------------	----------	-------------------	----------------------

Strongly Agree (1) Strongly Disagree

42  
9, 6, 6, 6  
7, 11

c. Select the program manager over the battalion commander.

1, 4 (5)	1, 1 (2)	1, 2, 2, 2 (7)	2, 1, 1, 2 2 (8)	3, 2, 1, 1 (7)	3, 2, 1, 2 2 (10)
----------	----------	-------------------	---------------------	-------------------	----------------------

Strongly Agree 1, 1, 1 (3) Strongly Disagree

44  
9, 7, 6, 6  
5, 11

d. Select the battalion commander over the program manager.

2, 1, 1, 1, 2 (7)	4, 1, 1, 2 (8)	2, 2, 1, 1 2 (8)	1, 2, 1, 1 (5)	1, 2, 1 (4)	2, 1, 2, 4 (9)
----------------------	-------------------	---------------------	-------------------	----------------	-------------------

Strongly Agree 1, 1, 1 (3) Strongly Disagree

43  
10, 6, 6, 6  
7, 11

e. Consider a technical service program manager equal to a technical service battalion commander.

3, 4, 5, 2, 5 (19)	2, 3, 1 (6)	5, 2, 1 (8)	1 (1)	1, 1, 3 (5)	1, 1, 1, 1 (4)
-----------------------	----------------	----------------	-------	----------------	-------------------

Strongly Agree Strongly Disagree

COMMENTS:

5. General officer positions in the Army Materiel Command should mainly be filled by:

(42)

a. Officers with a technical service corps background.

10, 5, 6, 5 5, 11	1, 4, 1, 1 (7)	3, 2, 1, 4 (10)	1, 2, 1, 2 (8)	4, 2, 1, 1 (9)	1, 3 (4)	1, 1, 3 (5)
	Strongly Agree					Strongly Disagree

(41)

b. Line officers with a background in acquisition or project management.

7, 5, 6, 5 5, 11	1, 1, 1 (3)	4, 1, 2, 1 (9)	4, 3, 3, 1 (15)	1, 1, 1, 2 (7)	1, 2 (4)	2 (2)
	Strongly Agree					Strongly Disagree

(41)

c. Line officers with an operational background.

7, 5, 6, 5 5, 11	1 (1)	3, 1, 1, 1 (6)	2, 1, 1, 2, 3 (9)	3, 2, 2, 1 (10)	1, 2, 1 (4)	2, 1, 1, 5 (9)
	Strongly Agree					Strongly Disagree

(46)

d. Both line officers and technical service corps officers.

10, 7, 6, 6 6, 11	6, 5, 3, 4, 4 (29)	2, 1, 2, 2 (10)	2, 1, 1, 1, 1 (6)	1 (1)		
	Strongly Agree					Strongly Disagree

(41)

e. Line officers with both operational and acquisition/project management background.

10, 5, 6, 5 4, 11	2, 1, 2, 4 (9)	3, 2, 3, 1, 2 (11)	4, 2, 2, 1 (12)	1, 1, 1, 1, 1 (5)	1, 1 (2)	2 (2)
	Strongly Agree					Strongly Disagree

COMMENTS:

6. As a member of a senior service college selection board, if the quality of performance of two officers was otherwise equal, you would:

(43) a. Consider the project manager equal to the battalion commander.

0,6,6,6 4,11	2,4,5,2 6 (9)	1,3,1 (5)	1,1,1,1 (4)	3,2,1 (6)	1,1,1 (3)	2,4 (6)
	Strongly Agree					Strongly Disagree

(43) b. Consider a technical service program manager equal to a line battalion commander.

0,6,6,6 4,11	3,5,2,3 (13)	2,1,2,4 (9)	1,1,1,1 (4)	1,1,1 (3)	2,1,2 (5)	3,1,3 (7)
	Strongly Agree					Strongly Disagree

(43) c. Select the program manager over the battalion commander.

0,6,6,6 5,11	3 (3)	1,1,1 (3)	1,2,2,1 (6)	3,1,1,2,3 (10)	1,2 (3)	5,2,1,3 3 (14)
	Strongly Agree		(4),1,2			Strongly Disagree

(45) d. Select the battalion commander over the program manager.

0,7,6,6 6,11	2,1,1,1 (5)	2,1,1,3 (7)	4,3,1,1 1 (10)	1,1,2,1 3 (8)	2,1,1 (4)	1,1,3,2 (7)
	Strongly Agree		(4),1,2			Strongly Disagree

(44) e. Consider a technical service program manager equal to a technical service battalion commander.

0,6,6,6 5,11	2,4,5,3 4 (18)	5,1,4,3 (13)	2 (2)	2 (2)	1,2,1 (4)	1,3 (4)
	Strongly Agree					Strongly Disagree

COMMENTS:

7. If established, I feel that officers in the project management career field should:

(44) a. Not return to branch material assignments above the rank of major.

0, 5, 6, 6 6, 11		1, (1)	1, 1, 1, 1, 1 (5)	2, 1, 1, 1 (4)	2, 2, 3, 1 1 (9)	5, 1, 1, 6, 3 8 (24)
	Strongly Agree		(1)			Strongly Disagree

(44) b. Serve in branch material assignments only as staff officers.

1, 5, 6, 6 6, 11	1, (1)	1, (1)	2 (2)	2, 1, 2, 1 (6)	4, 3, 3, 2 (12)	4, 1, 1, 6, 2 7 (21)
	Strongly Agree		(1)			Strongly Disagree

(44) c. Serve in branch material assignments as commanders.

1, 5, 6, 6 6, 11	3, 2, 3, 2 5 (15)	1, 1, 2, 2 3 (9)	5, 2, 2, 1 1 (11)	1, 2, 1, 1 (5)	1, (1)	1, 1 (2)
	Strongly Agree		(1)			Strongly Disagree

(44) d. Serve only as Deputy Project Managers to provide expertise to Project managers selected from officers with an operational/ command background.

1, 5, 6, 6 6, 11	1, 1 (2)	1, 1, 1 (3)	1, 1, 2, 1 (5)	3, 1, 2 (6)	4, 1, 1, 1 1 (8)	1, 2, 2, 4 3, 7 (19)
	Strongly Agree		(1)			Strongly Disagree

(45) e. Specialize in project management upon completion of branch material company command.

1, 6, 6, 6 6, 11	1, 2 (3)	1, 3, 2 (6)	2, 3, 2, 2 3 (12)	2, 1 (3)	3, 3, 1, 1 (8)	3, 1, 3, 2 3 (12)
	Strongly Agree		(1)			Strongly Disagree

COMMENTS:

8. If you were responsible for selecting a new project manager to replace an unsuccessful project manager and correct deficiencies in the overall program, would you:

a. Select an officer in the project management career field who has demonstrated success in previous project management positions

45

9, 6, 6, 7  
10, 11

1, 1 (1)		2 (2)	1, 1, 1, 1, 3 (7)	4, 4, 5, 1, 1 (12)	2, 1, 1, 5, 3 (17)
----------	--	-------	-------------------	--------------------	--------------------

Strongly Disagree Strongly Agree

b. Select a line officer who has demonstrated success in previous line assignments to include battalion command.

42

5, 6, 6  
1, 11

1, 2, 2 (5)	1, 2, 1 (4)	3, 2, 1, 1, 1 (10)	2, 1, 3, 1 (11)	3, 2, 2 (7)	1, 3 (4)
-------------	-------------	--------------------	-----------------	-------------	----------

Strongly Disagree Strongly Agree

c. Select an officer who is a known "problem solver and expediter" regardless of previous experience.

44

6, 6, 7  
5, 11

	1, 1 (1)	1 (1)	1, 2, 2, 1, 1 (7)	3, 3, 3, 1, 2 (13)	4, 1, 1, 5 (22)
--	----------	-------	-------------------	--------------------	-----------------

Strongly Disagree Strongly Agree

COMMENTS:

9. Indicate the relative importance of each type of experience listed below for a project manager. (Use 1 for the most important and 5 for the least important.)

	1	2	3	4	5
P. 1's <u>3</u>	WTD AVG <u>4</u>				
	a. Operational experience.				
	2, 2, 2, 1 1, 1, 4	4, 1, 2 7	2, 1, 1, 2 8	1, 2, 2, 2 1, 3, 11	5, 1, 1, 1, 1 10
	b. In a project office. (Not the project manager)				
	1, 1, 2 4	3, 3, 1, 2, 3 13	4, 1, 3, 1, 4 17	2, 1, 1, 1 5	3, 2, 1, 1 7
	c. Command experience.				
	6, 2, 2, 3, 3 20	2, 2, 2, 2 8	1, 1, 2, 1 5	1, 1, 2, 4 8	1, 1, 1, 1 4
	d. As a manager of a small project office.				
	4, 3, 2, 4 13	1, 1, 1, 2, 4 9	1, 2, 2, 1 6	3, 1, 2, 1, 1 9	1, 2, 1, 1 2, 1, 1 8
	e. General staff experience.				
	2 2	1, 1, 2, 3, 1 8	3, 4, 1, 2 10	3, 1, 1, 2, 3 10	3, 1, 3, 2 1, 5 5

COMMENTS:

ANNEX D

Data By Groups

TAB 1

Army Materiel Command (AMC)

SUBJECT: Army Project Management--A Career Field?

7 SENT

General Information:

Category: AMC

1. Which best characterizes your overall Army career?

7 RETURNED

①

1 a. Command/Operational

⑥

~~1~~ 6 b. Command/Technical (i.e., Technical Service)

       c. Staff/Technical

       d. Other (List): \_\_\_\_\_

2. What is your branch of service? \_\_\_\_\_

3. Have you served or are you serving in a defense acquisition/procurement related position?

⑦ 11111 Yes        No

4. Have you served or are you serving in a project management office?

② 11 Yes 5 1111 No

5. Are you familiar with DoD Directive 5000.1 ?

⑦ 11111 Totally familiar.        Aware of subject matter.  
       Not aware of this directive.

6. Have you commanded a battalion?

⑦ 11111 Yes        No

7. Have you attended a senior service college?

⑦ 11111 Yes        No

GENERAL INSTRUCTIONS: Each question on the pages that follow (with the exception of question 9) contains a response block where you may indicate your level of agreement or disagreement with the question asked. Please indicate your selected response with an "X" in the appropriate block.

1. Project managers should be:

a. Selected from line officers (i.e., combat arms) for assignment between branch material assignments.

6

			2	1	3
--	--	--	---	---	---

Strongly Agree Strongly Disagree

b. Selected from technical service corps officers with a weapons acquisition or procurement background.

6

1	1	1	2		1
---	---	---	---	--	---

Strongly Agree Strongly Disagree

c. Selected from officers who have completed battalion command.

6

1		1	1	1	2
---	--	---	---	---	---

Strongly Agree Strongly Disagree

d. Selected from line officers with previous project management office experience.

6

1	1		2	1	1
---	---	--	---	---	---

Strongly Agree Strongly Disagree

e. Selected from either line or technical service depending upon the specialized needs of the particular weapons acquisition program.

7

5	2				
---	---	--	--	--	--

Strongly Agree Strongly Disagree

COMMENTS:

2. A project management officer career field:

a. Should be established within the Army.

7		1	2	1	1	2
---	--	---	---	---	---	---

Strongly Agree

Strongly Disagree

b. Should include possible career progression within the field to general officer level.

6		1	2	2		1
---	--	---	---	---	--	---

Strongly Agree

Strongly Disagree

c. Should include only technical service corps officers.

6		1			1	4
---	--	---	--	--	---	---

Strongly Agree

Strongly Disagree

d. Should include only line officers with branch material assignments through the rank of captain.

6			1			5
---	--	--	---	--	--	---

Strongly Agree

Strongly Disagree

COMMENTS:

3. Project manager experience is equal in responsibility to:

a. Rank equivalent DA staff positions.

⑤

		①			④
--	--	---	--	--	---

Strongly Disagree Strongly Agree

b. Rank equivalent command. (e.g., COL PM equal Bde CO)

⑥

				②	④
--	--	--	--	---	---

Strongly Disagree Strongly Agree

c. Rank equivalent principal division staff positions.

⑤

		①			④
--	--	---	--	--	---

Strongly Disagree Strongly Agree

d. Rank equivalent corps or field army staff positions.

⑤

		①			④
--	--	---	--	--	---

Strongly Disagree Strongly Agree

COMMENTS:

4. As a member of a promotion selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

⑥

⑤			①				
---	--	--	---	--	--	--	--

Strongly Agree Strongly Disagree

b. Consider a technical service program manager equal to a line battalion commander.

⑥

④				+			①	
---	--	--	--	---	--	--	---	--

Strongly Agree ① Strongly Disagree

c. Select the program manager over the battalion commander.

⑥

①			②		+	①		①	
---	--	--	---	--	---	---	--	---	--

Strongly Agree ① Strongly Disagree

d. Select the battalion commander over the program manager.

⑥

		①		+	②		①		①	
--	--	---	--	---	---	--	---	--	---	--

Strongly Agree ① Strongly Disagree

e. Consider a technical service program manager equal to a technical service battalion commander.

⑥

⑤								①	
---	--	--	--	--	--	--	--	---	--

Strongly Agree Strongly Disagree

COMMENTS:

NOTE: Compared card at Bde & gvy level in 1 response to a & e.

5. General officer positions in the Army Materiel Command should mainly be filled by:

a. Officers with a technical service corps background.

⑤

④			①				
---	--	--	---	--	--	--	--

Strongly Agree Strongly Disagree

b. Line officers with a background in acquisition or project management.

⑤

①		①			①		②	
---	--	---	--	--	---	--	---	--

Strongly Agree Strongly Disagree

c. Line officers with an operational background.

⑤

		①			+	①		①		①	
--	--	---	--	--	---	---	--	---	--	---	--

Strongly Agree ① Strongly Disagree

d. Both line officers and technical service corps officers.

⑥

④			①		①			
---	--	--	---	--	---	--	--	--

Strongly Agree Strongly Disagree

e. Line officers with both operational and acquisition/project management background.

⑤

②		①			①		①	
---	--	---	--	--	---	--	---	--

Strongly Agree Strongly Disagree

COMMENTS:

6. As a member of a senior service college selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

⑥

⑤			①			
---	--	--	---	--	--	--

Strongly Agree Strongly Disagree

b. Consider a technical service program manager equal to a line battalion commander.

⑥

⑤						①	
---	--	--	--	--	--	---	--

Strongly Agree Strongly Disagree

c. Select the program manager over the battalion commander.

⑥

		②		①		①	
--	--	---	--	---	--	---	--

Strongly Agree ② Strongly Disagree

d. Select the battalion commander over the program manager.

⑥

		①		②		①	
--	--	---	--	---	--	---	--

Strongly Agree ② Strongly Disagree

e. Consider a technical service program manager equal to a technical service battalion commander.

⑥

⑤						①	
---	--	--	--	--	--	---	--

Strongly Agree Strongly Disagree

COMMENTS:

7. If established, I feel that officers in the project management career field should:

a. Not return to branch material assignments above the rank of major.

6						6	
Strongly Agree						Strongly Disagree	

b. Serve in branch material assignments only as staff officers.

6						6	
Strongly Agree						Strongly Disagree	

c. Serve in branch material assignments as commanders.

6	3		2		1				
Strongly Agree						Strongly Disagree			

d. Serve only as Deputy Project Managers to provide expertise to Project managers selected from officers with an operational/ command background.

6		1				1		4	
Strongly Agree						Strongly Disagree			

e. Specialize in project management upon completion of branch material company command.

6			2		1			3	
Strongly Agree						Strongly Disagree			

COMMENTS:

8. If you were responsible for selecting a new project manager to replace an unsuccessful project manager and correct deficiencies in the overall program, would you:

a. Select an officer in the project management career field who has demonstrated success in previous project management positions

7				1	1	5
	Strongly Disagree			Strongly Agree		

b. Select a line officer who has demonstrated success in previous line assignments to include battalion command.

6		2	1			3
	Strongly Disagree			Strongly Agree		

c. Select an officer who is a known "problem solver and expediter" regardless of previous experience.

7				1	1	5
	Strongly Disagree			Strongly Agree		

COMMENTS:

9. Indicate the relative importance of each type of experience listed below for a project manager. (Use 1 for the most important and 5 for the least important.)

1432543 a. Operational experience.

1-①, 2-①, 3-②, 4-②, 5-①

5325421 b. In a project office. (Not the project manager)

1-①, 2-②, 3-①, 4-①, 5-②

4151134 c. Command experience.

1-③, 2-0, 3-①, 4-②, 5-①

3514312 d. As a manager of a small project office.

1-②, 2-①, 3-②, 4-①, 5-①

2243255 e. General staff experience.

1-0, 2-③, 3-①, 4-①, 5-②

COMMENTS:

TAB 2

Project Managers (PM)

SUBJECT: Army Project Management--A Career Field?

13 SENT

General Information:

Category: PM

11 RETURNED

1. Which best characterizes your overall Army career?

- (5) ~~||||~~ a. Command/Operational
- (6) ~~||||~~ b. Command/Technical (i.e., Technical Service)
- \_\_\_ c. Staff/Technical
- \_\_\_ d. Other (List): \_\_\_\_\_

2. What is your branch of service? \_\_\_\_\_

3. Have you served or are you serving in a defense acquisition/procurement related position?

~~||||~~ Yes (11) \_\_\_ No

4. Have you served or are you serving in a project management office?

~~||||~~ Yes (11) \_\_\_ No

5. Are you familiar with DoD Directive 5000.1 ?

- (8) ~~||||~~ Totally familiar. (3) ~~|||~~ Aware of subject matter.
- \_\_\_ Not aware of this directive.

6. Have you commanded a battalion?

(9) ~~||||~~ Yes (1) \_\_\_ No

7. Have you attended a senior service college?

(1) ~~||~~ HIGHER CMD

(10) ~~||||~~ Yes (1) \_\_\_ No

GENERAL INSTRUCTIONS: Each question on the pages that follow (with the exception of question 9) contains a response block where you may indicate your level of agreement or disagreement with the question asked. Please indicate your selected response with an "X" in the appropriate block.

1. Project managers should be:

a. Selected from line officers (i.e., combat arms) for assignment between branch material assignments.

⑪

	①	②	①	①	⑥
--	---	---	---	---	---

Strongly Agree Strongly Disagree

b. Selected from technical service corps officers with a weapons acquisition or procurement background.

⑫

②	②	⑤	0	①	①
---	---	---	---	---	---

Strongly Agree Strongly Disagree

c. Selected from officers who have completed battalion command.

⑬

②	③	④	0	0	②
---	---	---	---	---	---

Strongly Agree Strongly Disagree

d. Selected from line officers with previous project management office experience.

⑭

②	②	④	0	②	①
---	---	---	---	---	---

Strongly Agree Strongly Disagree

e. Selected from either line or technical service depending upon the specialized needs of the particular weapons acquisition program.

⑮

⑧	②	①			
---	---	---	--	--	--

Strongly Agree Strongly Disagree

COMMENTS:

2. A project management officer career field:

a. Should be established within the Army.

11	2	3	2	2	0	2
----	---	---	---	---	---	---

Strongly Agree Strongly Disagree

b. Should include possible career progression within the field to general officer level.

12	5	3	0	1	0	2
----	---	---	---	---	---	---

Strongly Agree Strongly Disagree

c. Should include only technical service corps officers.

11			1		3	7
----	--	--	---	--	---	---

Strongly Agree Strongly Disagree

d. Should include only line officers with branch material assignments through the rank of captain.

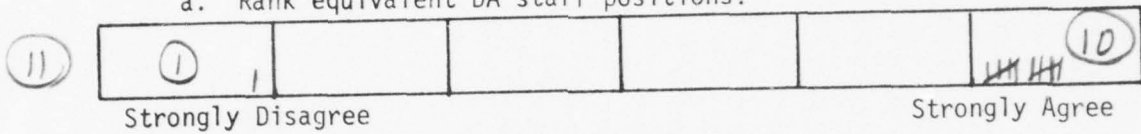
11					2	9
----	--	--	--	--	---	---

Strongly Agree Strongly Disagree

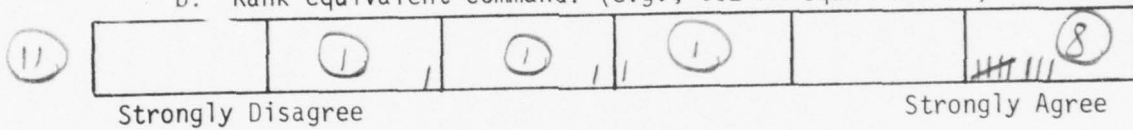
COMMENTS:

3. Project manager experience is equal in responsibility to:

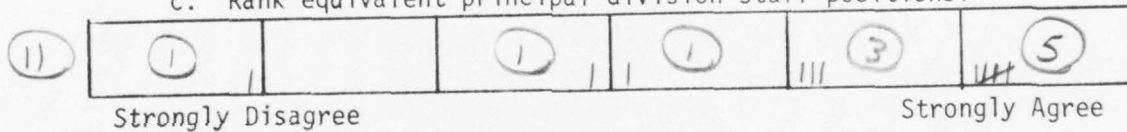
a. Rank equivalent DA staff positions.



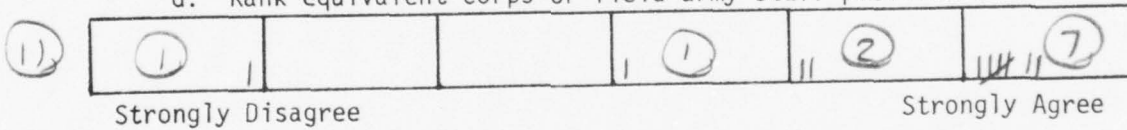
b. Rank equivalent command. (e.g., COL PM equal Bde CO)



c. Rank equivalent principal division staff positions.



d. Rank equivalent corps or field army staff positions.



COMMENTS:

4. As a member of a promotion selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

11) 

5 	1 	1 	1 	1 	2 
-------	-------	-------	-------	-------	-------

 Strongly Agree Strongly Disagree

b. Consider a technical service program manager equal to a line battalion commander.

11) 

4 	3 	2 		1 	1 
-------	-------	-------	--	-------	-------

 Strongly Agree Strongly Disagree

c. Select the program manager over the battalion commander.

11) 

4 		2 	2 	1 	2 
-------	--	-------	-------	-------	-------

 Strongly Agree Strongly Disagree

d. Select the battalion commander over the program manager.

11) 

2 	2 	2 	1 		4 
-------	-------	-------	-------	--	-------

 Strongly Agree Strongly Disagree

e. Consider a technical service program manager equal to a technical service battalion commander.

11) 

5 	1 	1 		3 	1 
-------	-------	-------	--	-------	-------

 Strongly Agree Strongly Disagree

COMMENTS:

5. General officer positions in the Army Materiel Command should mainly be filled by:

a. Officers with a technical service corps background.

⑪

①	④	②	①		③
---	---	---	---	--	---

Strongly Agree Strongly Disagree

b. Line officers with a background in acquisition or project management.

⑫

①	①	④	②	①	②
---	---	---	---	---	---

Strongly Agree Strongly Disagree

c. Line officers with an operational background.

⑬

	①	③	②		⑤
--	---	---	---	--	---

Strongly Agree Strongly Disagree

d. Both line officers and technical service corps officers.

⑭

⑦	③	①			
---	---	---	--	--	--

Strongly Agree Strongly Disagree

e. Line officers with both operational and acquisition/project management background.

⑮

④		③	①	①	②
---	--	---	---	---	---

Strongly Agree Strongly Disagree

COMMENTS:

6. As a member of a senior service college selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

11) 

6	1				4
---	---	--	--	--	---

  
Strongly Agree Strongly Disagree

b. Consider a technical service program manager equal to a line battalion commander.

11) 

3	4	1			3
---	---	---	--	--	---

  
Strongly Agree Strongly Disagree

c. Select the program manager over the battalion commander.

11) 

3	1	1	3		3
---	---	---	---	--	---

  
Strongly Agree Strongly Disagree

d. Select the battalion commander over the program manager.

11) 

1	3	1	3	1	2
---	---	---	---	---	---

  
Strongly Agree Strongly Disagree

e. Consider a technical service program manager equal to a technical service battalion commander.

11) 

4	3			1	3
---	---	--	--	---	---

  
Strongly Agree Strongly Disagree

COMMENTS:

7. If established, I feel that officers in the project management career field should:

a. Not return to branch material assignments above the rank of major.

11

		1	1	1	8
--	--	---	---	---	---

Strongly Agree Strongly Disagree

b. Serve in branch material assignments only as staff officers.

11

		2		2	7
--	--	---	--	---	---

Strongly Agree Strongly Disagree

c. Serve in branch material assignments as commanders.

11

5	3	1	1		1
---	---	---	---	--	---

Strongly Agree Strongly Disagree

d. Serve only as Deputy Project Managers to provide expertise to Project managers selected from officers with an operational/ command background.

11

1	1	1		1	7
---	---	---	--	---	---

Strongly Agree Strongly Disagree

e. Specialize in project management upon completion of branch material company command.

11

2	2	3		1	3
---	---	---	--	---	---

Strongly Agree Strongly Disagree

COMMENTS:

SUBJECT: Army Project Management--A Career Field?

10 SENT

General Information:

Category: GOPB

6 RETURNED

1. Which best characterizes your overall Army career?

|||| a. Command/Operational

|| b. Command/Technical (i.e., Technical Service)

    c. Staff/Technical

    d. Other (List): \_\_\_\_\_

2. What is your branch of service? \_\_\_\_\_

3. Have you served or are you serving in a defense acquisition/procurement related position?

1 Yes

5 ~~||||~~ No

4. Have you served or are you serving in a project management office?

    Yes 6 ~~||||~~ No

5. Are you familiar with DoD Directive 5000.1 ?

1 ~~||||~~ Totally familiar.     Aware of subject matter.

5 ~~||||~~ Not aware of this directive.

6. Have you commanded a battalion? 6 ~~||||~~ Yes     No

7. Have you attended a senior service college?

6 ~~||||~~ Yes     No

GENERAL INSTRUCTIONS: Each question on the pages that follow (with the exception of question 9) contains a response block where you may indicate your level of agreement or disagreement with the question asked. Please indicate your selected response with an "X" in the appropriate block.

8. If you were responsible for selecting a new project manager to replace an unsuccessful project manager and correct deficiencies in the overall program, would you:

a. Select an officer in the project management career field who has demonstrated success in previous project management positions

11

			3	2	6
--	--	--	---	---	---

Strongly Disagree Strongly Agree

b. Select a line officer who has demonstrated success in previous line assignments to include battalion command.

11

2	1	2	4	2	
---	---	---	---	---	--

Strongly Disagree Strongly Agree

c. Select an officer who is a known "problem solver and expediter" regardless of previous experience.

11

	1			1	9
--	---	--	--	---	---

Strongly Disagree Strongly Agree

COMMENTS:

9. Indicate the relative importance of each type of experience listed below for a project manager. (Use 1 for the most important and 5 for the least important.)

- 4553541453a. Operational experience. 1-①, 2-0, 3-②, 4-③, 5-⑤
- 33322153421b. In a project office. (Not the project manager)  
1-②, 2-③, 3-④, 4-①, 5-①
- 2114432544c. Command experience.  
1-③, 2-②, 3-①, 4-④, 5-①
- 12231214512d. As a manager of a small project office.  
1-④, 2-④, 3-①, 4-①, 5-①
- 45445325535e. General staff experience.  
1-0, 2-①, 3-②, 4-③, 5-⑤

COMMENTS:

TAB 3

General Officer Promotion Board (GOPB)

1. Project managers should be:

a. Selected from line officers (i.e., combat arms) for assignment between branch material assignments.

⑥

①	①	①	②		
---	---	---	---	--	--

Strongly Agree ① Strongly Disagree

b. Selected from technical service corps officers with a weapons acquisition or procurement background.

⑥

①	③		②		
---	---	--	---	--	--

Strongly Agree ① Strongly Disagree

c. Selected from officers who have completed battalion command.

⑥

①	①	②	①		
---	---	---	---	--	--

Strongly Agree ① Strongly Disagree

d. Selected from line officers with previous project management office experience.

⑥

①		①	②		
---	--	---	---	--	--

Strongly Agree ② Strongly Disagree

e. Selected from either line or technical service depending upon the specialized needs of the particular weapons acquisition program.

⑥

④	①				①
---	---	--	--	--	---

Strongly Agree ① Strongly Disagree

COMMENTS:

2. A project management officer career field:

a. Should be established within the Army.

5			2 //		2 //	1 /
	Strongly Agree			Strongly Disagree		

b. Should include possible career progression within the field to general officer level.

4	1 /	1 /	1 /	1 /		
	Strongly Agree			Strongly Disagree		

c. Should include only technical service corps officers.

4				1 /	1 /	2 //
	Strongly Agree			Strongly Disagree		

d. Should include only line officers with branch material assignments through the rank of captain.

4				1 /	1 /	2 //
	Strongly Agree			Strongly Disagree		

COMMENTS:

1- I really don't know enough to comment on this.

3. Project manager experience is equal in responsibility to:

a. Rank equivalent DA staff positions.

⑤ 

			①	②	②
--	--	--	---	---	---

  
Strongly Disagree Strongly Agree

b. Rank equivalent command. (e.g., COL PM equal Bde CO)

⑤ 

①	①	①	①		①
---	---	---	---	--	---

  
Strongly Disagree Strongly Agree

c. Rank equivalent principal division staff positions.

④ 

		①	①		②
--	--	---	---	--	---

  
Strongly Disagree Strongly Agree

d. Rank equivalent corps or field army staff positions.

④ 

			①	①	②
--	--	--	---	---	---

  
Strongly Disagree Strongly Agree

COMMENTS:

1- I don't know enough to comment with credibility.

4. As a member of a promotion selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

③	①			②		
	Strongly Agree					Strongly Disagree

b. Consider a technical service program manager equal to a line battalion commander.

④	①			②		①
	Strongly Agree					Strongly Disagree

c. Select the program manager over the battalion commander.

④				②		②
	Strongly Agree					Strongly Disagree

d. Select the battalion commander over the program manager.

⑤	①		①	①		②
	Strongly Agree					Strongly Disagree

e. Consider a technical service program manager equal to a technical service battalion commander.

④	②		②			
	Strongly Agree					Strongly Disagree

COMMENTS:

5. General officer positions in the Army Materiel Command should mainly be filled by:

a. Officers with a technical service corps background.

5

①		②	①		①
Strongly Agree			Strongly Disagree		

b. Line officers with a background in acquisition or project management.

5

①		①	②		
Strongly Agree			Strongly Disagree		

c. Line officers with an operational background.

5

①		②			①
Strongly Agree			Strongly Disagree		

d. Both line officers and technical service corps officers.

6

④	②				
Strongly Agree			Strongly Disagree		

e. Line officers with both operational and acquisition/project management background.

4

	②	①	①		
Strongly Agree			Strongly Disagree		

COMMENTS:

6. As a member of a senior service college selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

④

② II		① I	① I		
------	--	-----	-----	--	--

Strongly Agree Strongly Disagree

b. Consider a technical service program manager equal to a line battalion commander.

④

② II		① I	① I		
------	--	-----	-----	--	--

Strongly Agree Strongly Disagree

c. Select the program manager over the battalion commander.

⑤

			② II		③ III
--	--	--	------	--	-------

Strongly Agree Strongly Disagree

d. Select the battalion commander over the program manager.

⑥

① I		① I	① I		③ III
-----	--	-----	-----	--	-------

Strongly Agree Strongly Disagree

e. Consider a technical service program manager equal to a technical service battalion commander.

⑤

③ III		② II			
-------	--	------	--	--	--

Strongly Agree Strongly Disagree

COMMENTS:

7. If established, I feel that officers in the project management career field should:

a. Not return to branch material assignments above the rank of major.

⑥

		①		①	③	
Strongly Agree			①	Strongly Disagree		

b. Serve in branch material assignments only as staff officers.

⑥

①	①		①		②	
Strongly Agree			①	Strongly Disagree		

c. Serve in branch material assignments as commanders.

⑥

②			①	①	①	
Strongly Agree			①	Strongly Disagree		

d. Serve only as Deputy Project Managers to provide expertise to Project managers selected from officers with an operational/ command background.

⑥

			②		③	
Strongly Agree			①	Strongly Disagree		

e. Specialize in project management upon completion of branch material company command.

⑥

		②		①	②	
Strongly Agree			①	Strongly Disagree		

COMMENTS:

*1 - I really don't know.*

8. If you were responsible for selecting a new project manager to replace an unsuccessful project manager and correct deficiencies in the overall program, would you:

a. Select an officer in the project management career field who has demonstrated success in previous project management positions

⑥

①				①		①		③	
---	--	--	--	---	--	---	--	---	--

Strongly Disagree Strongly Agree

b. Select a line officer who has demonstrated success in previous line assignments to include battalion command.

⑤

②			①		①			
---	--	--	---	--	---	--	--	--

Strongly Disagree ① Strongly Agree

c. Select an officer who is a known "problem solver and expediter" regardless of previous experience.

⑤

			①		②		②	
--	--	--	---	--	---	--	---	--

Strongly Disagree Strongly Agree

COMMENTS:

9. Indicate the relative importance of each type of experience listed below for a project manager. (Use 1 for the most important and 5 for the least important.)

52214a. Operational experience. 1-(1), 2-(2), 3-0, 4-(1), 5-(1)

33533b. In a project office. (Not the project manager)

1-0, 2-0, 3-(4), 4-0, 5-(1)

11331c. Command experience.

1-(3), 2-0, 3-(2), 4-0, 5-0

25452d. As a manager of a small project office.

1-0, 2-(2), 3-0, 4-(1), 5-(2)

44115e. General staff experience.

1-(2), 2-0, 3-0, 4-(2), 5-(1)

COMMENTS:

TAB 4

Colonel Promotion Board (COLPB)

SUBJECT: Army Project Management--A Career Field?

✓ 8 SENT

General Information:

Category: COLPB

7 RETURNED

1. Which best characterizes your overall Army career?

- (5) ~~III~~ a. Command/Operational
- (2) II b. Command/Technical (i.e., Technical Service)
- c. Staff/Technical
- d. Other (List): \_\_\_\_\_

2. What is your branch of service? \_\_\_\_\_

3. Have you served or are you serving in a defense acquisition/procurement related position?

(3) III Yes      (4) III No

4. Have you served or are you serving in a project management office?

(1) I Yes      (6) ~~III~~ No

5. Are you familiar with DoD Directive 5000.1 ?

(1) I Totally familiar. (3) III Aware of subject matter.

(3) III Not aware of this directive.

6. Have you commanded a battalion?

(7) III Yes           No

7. Have you attended a senior service college?

(7) III Yes           No

GENERAL INSTRUCTIONS: Each question on the pages that follow (with the exception of question 9) contains a response block where you may indicate your level of agreement or disagreement with the question asked. Please indicate your selected response with an "X" in the appropriate block.

1. Project managers should be:

a. Selected from line officers (i.e., combat arms) for assignment between branch material assignments.

⑥

	①		①	②	②
--	---	--	---	---	---

Strongly Agree Strongly Disagree

b. Selected from technical service corps officers with a weapons acquisition or procurement background.

⑥

①	②	①	①		①
---	---	---	---	--	---

Strongly Agree Strongly Disagree

c. Selected from officers who have completed battalion command.

⑥

①	①	②	①		①
---	---	---	---	--	---

Strongly Agree Strongly Disagree

d. Selected from line officers with previous project management office experience.

⑥

②	①	②	①		
---	---	---	---	--	--

Strongly Agree Strongly Disagree

e. Selected from either line or technical service depending upon the specialized needs of the particular weapons acquisition program.

⑦

⑤	②				
---	---	--	--	--	--

Strongly Agree Strongly Disagree

COMMENTS:

2. A project management officer career field:

a. Should be established within the Army.

⑦

	③ III	① I		③ III	
--	-------	-----	--	-------	--

Strongly Agree Strongly Disagree

b. Should include possible career progression within the field to general officer level.

⑥

① I	③ III	② II			
-----	-------	------	--	--	--

Strongly Agree Strongly Disagree

c. Should include only technical service corps officers.

⑥

				④ IIII	② II
--	--	--	--	--------	------

Strongly Agree Strongly Disagree

d. Should include only line officers with branch material assignments through the rank of captain.

⑥

				② II	④ IIII
--	--	--	--	------	--------

Strongly Agree Strongly Disagree

COMMENTS:

3. Project manager experience is equal in responsibility to:

a. Rank equivalent DA staff positions.

6		1			2	3
	Strongly Disagree					Strongly Agree

b. Rank equivalent command. (e.g., COL PM equal Bde CO)

6		1			2	3
	Strongly Disagree					Strongly Agree

c. Rank equivalent principal division staff positions.

6		2				4
	Strongly Disagree					Strongly Agree

d. Rank equivalent corps or field army staff positions.

6		1	1			4
	Strongly Disagree					Strongly Agree

COMMENTS:

4. As a member of a promotion selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

⑥

⑤ IIII				① I	
--------	--	--	--	-----	--

Strongly Agree Strongly Disagree

b. Consider a technical service program manager equal to a line battalion commander.

⑥

④ IIII	① I			① I	
--------	-----	--	--	-----	--

Strongly Agree Strongly Disagree

c. Select the program manager over the battalion commander.

⑥

	① I	① I	① I		② II
--	-----	-----	-----	--	------

Strongly Agree Strongly Disagree

d. Select the battalion commander over the program manager.

⑦

① I	① I		① I	① I	② II
-----	-----	--	-----	-----	------

Strongly Agree Strongly Disagree

e. Consider a technical service program manager equal to a technical service battalion commander.

⑥

④ IIII				① I	① I
--------	--	--	--	-----	-----

Strongly Agree Strongly Disagree

COMMENTS:

5. General officer positions in the Army Materiel Command should mainly be filled by:

a. Officers with a technical service corps background.

5	1	2	2			
---	---	---	---	--	--	--

Strongly Agree Strongly Disagree

b. Line officers with a background in acquisition or project management.

5		1	3	1		
---	--	---	---	---	--	--

Strongly Agree Strongly Disagree

c. Line officers with an operational background.

5			1	2		2
---	--	--	---	---	--	---

Strongly Agree Strongly Disagree

d. Both line officers and technical service corps officers.

7	5	1	1			
---	---	---	---	--	--	--

Strongly Agree Strongly Disagree

e. Line officers with both operational and acquisition/project management background.

5		2	2	1		
---	--	---	---	---	--	--

Strongly Agree Strongly Disagree

COMMENTS:

6. As a member of a senior service college selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

⑥

④			①			①		
Strongly Agree					Strongly Disagree			

b. Consider a technical service program manager equal to a line battalion commander.

⑥

③		①		①				①		
Strongly Agree					Strongly Disagree					

c. Select the program manager over the battalion commander.

⑥

		①		①				①		②	
Strongly Agree							Strongly Disagree				

d. Select the battalion commander over the program manager.

⑦

①		①				①		②		①	
Strongly Agree							Strongly Disagree				

e. Consider a technical service program manager equal to a technical service battalion commander.

⑥

④		①						①		
Strongly Agree					Strongly Disagree					

COMMENTS:

7. If established, I feel that officers in the project management career field should:

a. Not return to branch material assignments above the rank of major.

5			1	1	2	1
---	--	--	---	---	---	---

Strongly Agree Strongly Disagree

b. Serve in branch material assignments only as staff officers.

5				1	3	1
---	--	--	--	---	---	---

Strongly Agree Strongly Disagree

c. Serve in branch material assignments as commanders.

5		1	2	2		
---	--	---	---	---	--	--

Strongly Agree Strongly Disagree

d. Serve only as Deputy Project Managers to provide expertise to Project managers selected from officers with an operational/ command background.

5		1	1		1	2
---	--	---	---	--	---	---

Strongly Agree Strongly Disagree

e. Specialize in project management upon completion of branch material company command.

6		3		2		1
---	--	---	--	---	--	---

Strongly Agree Strongly Disagree

COMMENTS:

8. If you were responsible for selecting a new project manager to replace an unsuccessful project manager and correct deficiencies in the overall program, would you:

a. Select an officer in the project management career field who has demonstrated success in previous project management positions

⑥

			①	④	①
--	--	--	---	---	---

Strongly Disagree Strongly Agree

b. Select a line officer who has demonstrated success in previous line assignments to include battalion command.

⑤

①	①	②	①		
---	---	---	---	--	--

Strongly Disagree Strongly Agree

c. Select an officer who is a known "problem solver and expediter" regardless of previous experience.

⑥

			②	③	①
--	--	--	---	---	---

Strongly Disagree Strongly Agree

COMMENTS:

9. Indicate the relative importance of each type of experience listed below for a project manager. (Use 1 for the most important and 5 for the least important.)

134154a. Operational experience.

1-(2), 2-0, 3-(1), 4-(2), 5-(1)

422342b. In a project office. (Not the project manager)

1-0, 2-(3), 3-(1), 4-(2), 5-0

245121c. Command experience.

1-(2), 2-(2), 3-0, 4-(1), 5-(1)

511415d. As a manager of a small project office.

1-(3), 2-0, 3-0, 4-(1), 5-(2)

353233e. General staff experience.

1-0, 2-(1), 3-(4), 4-0, 5-(1)

COMMENTS:

TAB 5

Lieutenant Colonel Promotion Board (LTCPB)



TAB 5

Lieutenant Colonel Promotion Board (LTCPB)

SUBJECT: Army Project Management--A Career Field?

✓ 8 SENT

General Information:

Category: LTCPB

7 RETURNED

1. Which best characterizes your overall Army career?

⑥

~~IIII~~ a. Command/Operational

\_\_\_\_\_ b. Command/Technical (i.e., Technical Service)

①

I c. Staff/Technical Finance Corps.

\_\_\_\_\_ d. Other (List): \_\_\_\_\_

2. What is your branch of service? \_\_\_\_\_

3. Have you served or are you serving in a defense acquisition/procurement related position?

③ III Yes

④ IIII No

4. Have you served or are you serving in a project management office?

\_\_\_\_\_ Yes ⑦ IIIIII No

5. Are you familiar with DoD Directive 5000.1 ?

\_\_\_\_\_ Totally familiar ⑤ IIII Aware of subject matter.

② II Not aware of this directive.

6. Have you commanded a battalion?

⑥ IIII Yes

① I No

7. Have you attended a senior service college?

⑦ IIIIII Yes \_\_\_\_\_ No

GENERAL INSTRUCTIONS: Each question on the pages that follow (with the exception of question 9) contains a response block where you may indicate your level of agreement or disagreement with the question asked. Please indicate your selected response with an "X" in the appropriate block.

1. Project managers should be:

a. Selected from line officers (i.e., combat arms) for assignment between branch material assignments.

⑥

	② //	② //	① /	① /	
--	------	------	-----	-----	--

Strongly Agree Strongly Disagree

b. Selected from technical service corps officers with a weapons acquisition or procurement background.

⑥

	① /	② //	① /	② //	
--	-----	------	-----	------	--

Strongly Agree Strongly Disagree

c. Selected from officers who have completed battalion command.

⑥

② //	② //	② //			
------	------	------	--	--	--

Strongly Agree Strongly Disagree

d. Selected from line officers with previous project management office experience.

⑥

	③ ///	② //		① /	
--	-------	------	--	-----	--

Strongly Agree Strongly Disagree

e. Selected from either line or technical service depending upon the specialized needs of the particular weapons acquisition program.

⑥

③ ///	② //	① /			
-------	------	-----	--	--	--

Strongly Agree Strongly Disagree

COMMENTS:

2. A project management officer career field:

a. Should be established within the Army.

⑥

	② //	③ ///	① /		
--	------	-------	-----	--	--

Strongly Agree Strongly Disagree

b. Should include possible career progression within the field to general officer level.

⑥

	② //	② //	② //		
--	------	------	------	--	--

Strongly Agree Strongly Disagree

c. Should include only technical service corps officers.

⑥

				④ ///	② //
--	--	--	--	-------	------

Strongly Agree Strongly Disagree

d. Should include only line officers with branch material assignments through the rank of captain.

⑥

		① /		③ ///	② //
--	--	-----	--	-------	------

Strongly Agree Strongly Disagree

COMMENTS:

3. Project manager experience is equal in responsibility to:

a. Rank equivalent DA staff positions.

⑥					⑤ <del>    </del>	①
	Strongly Disagree				Strongly Agree	

b. Rank equivalent command. (e.g., COL PM equal Bde CO)

⑥		①		②	②	①
	Strongly Disagree			Strongly Agree		

c. Rank equivalent principal division staff positions.

⑥	①	①	①		③	
	Strongly Disagree				Strongly Agree	

d. Rank equivalent corps or field army staff positions.

⑥	①	①	①		③	
	Strongly Disagree				Strongly Agree	

COMMENTS:

4. As a member of a promotion selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

⑥ 

	①	②	②	①	
--	---	---	---	---	--

  
 Strongly Agree Strongly Disagree

b. Consider a technical service program manager equal to a line battalion commander.

⑥ 

	①	②	①	①	①
--	---	---	---	---	---

  
 Strongly Agree Strongly Disagree

c. Select the program manager over the battalion commander.

⑥ 

	①	②		②	①
--	---	---	--	---	---

  
 Strongly Agree Strongly Disagree

d. Select the battalion commander over the program manager.

⑥ 

①	①	②		②	
---	---	---	--	---	--

  
 Strongly Agree Strongly Disagree

e. Consider a technical service program manager equal to a technical service battalion commander.

⑥ 

	③		①	①	①
--	---	--	---	---	---

  
 Strongly Agree Strongly Disagree

COMMENTS:

5. General officer positions in the Army Materiel Command should mainly be filled by:

a. Officers with a technical service corps background.

⑥ 

	①		②	③	
--	---	--	---	---	--

  
Strongly Agree Strongly Disagree

b. Line officers with a background in acquisition or project management.

⑥ 

	②	③		①	
--	---	---	--	---	--

  
Strongly Agree Strongly Disagree

c. Line officers with an operational background.

⑥ 

	①	①	②	②	
--	---	---	---	---	--

  
Strongly Agree Strongly Disagree

d. Both line officers and technical service corps officers.

⑥ 

③	②	①			
---	---	---	--	--	--

  
Strongly Agree Strongly Disagree

e. Line officers with both operational and acquisition/project management background.

⑥ 

①	③	②			
---	---	---	--	--	--

  
Strongly Agree Strongly Disagree

COMMENTS:

6. As a member of a senior service college selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

⑥ 

	③		②	①	
--	---	--	---	---	--

  
Strongly Agree Strongly Disagree

b. Consider a technical service program manager equal to a line battalion commander.

⑥ 

	②	①	①	②	
--	---	---	---	---	--

  
Strongly Agree Strongly Disagree

c. Select the program manager over the battalion commander.

⑥ 

	①	②	①	②	
--	---	---	---	---	--

  
Strongly Agree Strongly Disagree

d. Select the battalion commander over the program manager.

⑥ 

	①	③	①	①	
--	---	---	---	---	--

  
Strongly Agree Strongly Disagree

e. Consider a technical service program manager equal to a technical service battalion commander.

⑥ 

	④			②	
--	---	--	--	---	--

  
Strongly Agree Strongly Disagree

COMMENTS:

7. If established, I feel that officers in the project management career field should:

a. Not return to branch material assignments above the rank of major.

⑥ 

	①	①		③	①
--	---	---	--	---	---

  
Strongly Agree Strongly Disagree

b. Serve in branch material assignments only as staff officers.

⑥ 

			②	③	①
--	--	--	---	---	---

  
Strongly Agree Strongly Disagree

c. Serve in branch material assignments as commanders.

⑥ 

②	②	②			
---	---	---	--	--	--

  
Strongly Agree Strongly Disagree

d. Serve only as Deputy Project Managers to provide expertise to Project managers selected from officers with an operational/ command background.

⑥ 

		②	①	①	②
--	--	---	---	---	---

  
Strongly Agree Strongly Disagree

e. Specialize in project management upon completion of branch material company command.

⑥ 

		③		③	
--	--	---	--	---	--

  
Strongly Agree Strongly Disagree

COMMENTS:

8. If you were responsible for selecting a new project manager to replace an unsuccessful project manager and correct deficiencies in the overall program, would you:

a. Select an officer in the project management career field who has demonstrated success in previous project management positions

(6)					(5) IIII	(1) I
	Strongly Disagree				Strongly Agree	

b. Select a line officer who has demonstrated success in previous line assignments to include battalion command.

(6)		(1) I	(3) III	(2) II	
	Strongly Disagree			Strongly Agree	

c. Select an officer who is a known "problem solver and expediter" regardless of previous experience.

(6)			(2) II	(3) III	(1) I
	Strongly Disagree			Strongly Agree	

COMMENTS:

9. Indicate the relative importance of each type of experience listed below for a project manager. (Use 1 for the most important and 5 for the least important.)

531414a. Operational experience.

1-2, 2-0, 3-1, 4-2, 5-1

124333b. In a project office. (Not the project manager)

1-1, 2-1, 3-3, 4-1, 5-0

212151c. Command experience.

1-3, 2-2, 3-0, 4-0, 5-1

343542d. As a manager of a small project office.

1-0, 2-1, 3-2, 4-2, 5-1

455225e. General staff experience.

1-0, 2-2, 3-0, 4-1, 5-3

COMMENTS:

TAB 6

Brigade Commanders (BC)

SUBJECT: Army Project Management--A Career Field?

12 SENT  
BC

General Information:

Category: BC

10 RETURNED

1. Which best characterizes your overall Army career?

- (10) ~~III~~ ~~III~~ a. Command/Operational
- b. Command/Technical (i.e., Technical Service)
- c. Staff/Technical
- d. Other (List): \_\_\_\_\_

2. What is your branch of service? \_\_\_\_\_

3. Have you served or are you serving in a defense acquisition/procurement related position?

(3) ~~III~~ Yes  (7) ~~II~~ ~~III~~ No

4. Have you served or are you serving in a project management office?

Yes  (10) ~~III~~ ~~III~~ No

5. Are you familiar with DoD Directive 5000.1 ?

- (1) ~~I~~ Totally familiar.
- (5) ~~III~~ Aware of subject matter.
- (4) ~~III~~ Not aware of this directive.

6. Have you commanded a battalion?

(10) ~~III~~ ~~III~~ Yes  No

7. Have you attended a senior service college?

(10) ~~III~~ ~~III~~ Yes  No

GENERAL INSTRUCTIONS: Each question on the pages that follow (with the exception of question 9) contains a response block where you may indicate your level of agreement or disagreement with the question asked. Please indicate your selected response with an "X" in the appropriate block.

AD-A062 386

DEFENSE SYSTEMS MANAGEMENT SCHOOL FORT BELVOIR VA  
ARMY PROJECT MANAGEMENT--A CAREER FIELD.(U)  
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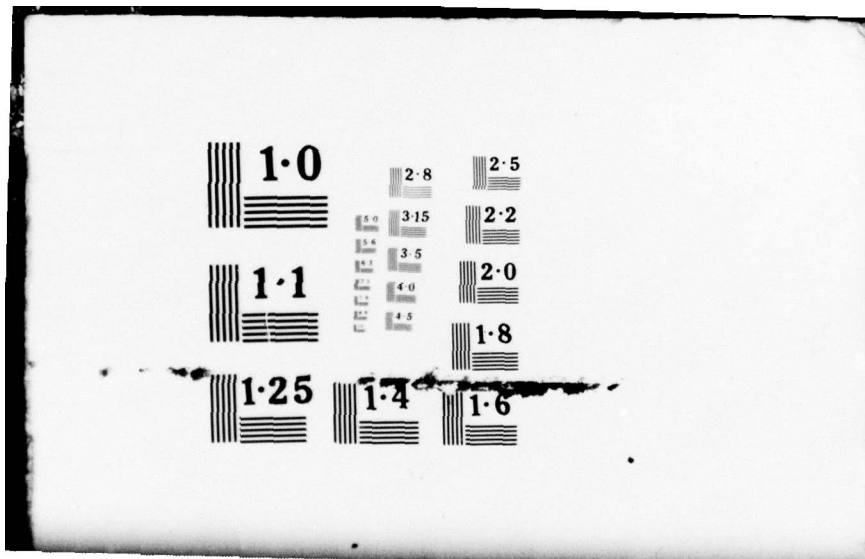
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1·0

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1·1

3·5

2·0

4·0

4·5

1·8

1·25

1·4

1·6

1. Project managers should be:

a. Selected from line officers (i.e., combat arms) for assignment between branch material assignments.

⑨

②		①		③		①		②		
---	--	---	--	---	--	---	--	---	--	--

Strongly Agree Strongly Disagree

b. Selected from technical service corps officers with a weapons acquisition or procurement background.

⑨

		③		③		①		②		
--	--	---	--	---	--	---	--	---	--	--

Strongly Agree Strongly Disagree

c. Selected from officers who have completed battalion command.

⑨

④		②		②		①				
---	--	---	--	---	--	---	--	--	--	--

Strongly Agree Strongly Disagree

d. Selected from line officers with previous project management office experience.

⑨

		①		④		②		②		
--	--	---	--	---	--	---	--	---	--	--

Strongly Agree Strongly Disagree

e. Selected from either line or technical service depending upon the specialized needs of the particular weapons acquisition program.

⑨

③		②		②		①		①		
---	--	---	--	---	--	---	--	---	--	--

Strongly Agree Strongly Disagree

COMMENTS:

2. A project management officer career field:

a. Should be established within the Army.

9		2				3		4	
	Strongly Agree							Strongly Disagree	

b. Should include possible career progression within the field to general officer level.

9	1		2				2		4	
	Strongly Agree							Strongly Disagree		

c. Should include only technical service corps officers.

9		1		1				7		
	Strongly Agree							Strongly Disagree		

d. Should include only line officers with branch material assignments through the rank of captain.

9		1		1		2		1		4	
	Strongly Agree							Strongly Disagree			

COMMENTS:

3. Project manager experience is equal in responsibility to:

a. Rank equivalent DA staff positions.

9

1		2		1	5
---	--	---	--	---	---

Strongly Disagree Strongly Agree

b. Rank equivalent command. (e.g., COL PM equal Bde CO)

10

3	2	2	1	1	1
---	---	---	---	---	---

Strongly Disagree Strongly Agree

c. Rank equivalent principal division staff positions.

9

	2	1	2	1	3
--	---	---	---	---	---

Strongly Disagree Strongly Agree

d. Rank equivalent corps or field army staff positions.

9

	1	1	2	2	3
--	---	---	---	---	---

Strongly Disagree Strongly Agree

COMMENTS:

4. As a member of a promotion selection board, if the quality of performance of two officers was otherwise equal, you would:

a. Consider the project manager equal to the battalion commander.

⑩

①	②	①	④	①	①
---	---	---	---	---	---

Strongly Agree Strongly Disagree

b. Consider a technical service program manager equal to a line battalion commander.

⑨

	③	①		②	③
--	---	---	--	---	---

Strongly Agree Strongly Disagree

c. Select the program manager over the battalion commander.

⑨

			①	②	③	③
--	--	--	---	---	---	---

Strongly Agree Strongly Disagree

d. Select the battalion commander over the program manager.

⑨

②	④	②	①		
---	---	---	---	--	--

Strongly Agree Strongly Disagree

e. Consider a technical service program manager equal to a technical service battalion commander.

⑩

③	②	⑤			
---	---	---	--	--	--

Strongly Agree Strongly Disagree

COMMENTS:

5. General officer positions in the Army Materiel Command should mainly be filled by:

a. Officers with a technical service corps background.

⑩

	③	①	④	①	①
--	---	---	---	---	---

Strongly Agree Strongly Disagree

b. Line officers with a background in acquisition or project management.

⑨

	④	④	①		
--	---	---	---	--	--

Strongly Agree Strongly Disagree

c. Line officers with an operational background.

⑨

	③	②	③	①	
--	---	---	---	---	--

Strongly Agree Strongly Disagree

d. Both line officers and technical service corps officers.

⑩

⑥	②	②			
---	---	---	--	--	--

Strongly Agree Strongly Disagree

e. Line officers with both operational and acquisition/project management background.

⑩

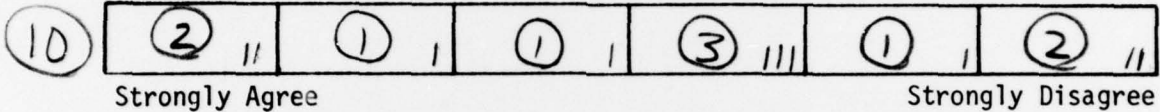
②	③	④	①		
---	---	---	---	--	--

Strongly Agree Strongly Disagree

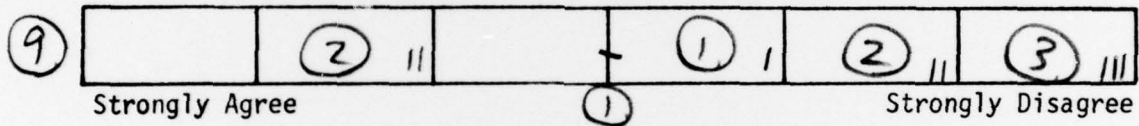
COMMENTS:

6. As a member of a senior service college selection board, if the quality of performance of two officers was otherwise equal, you would:

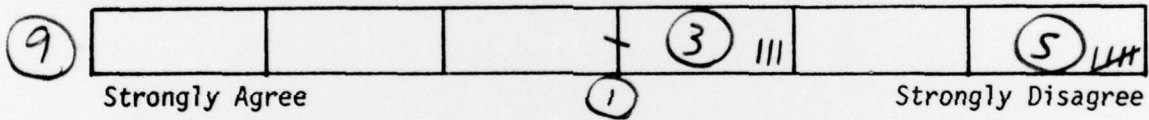
a. Consider the project manager equal to the battalion commander.



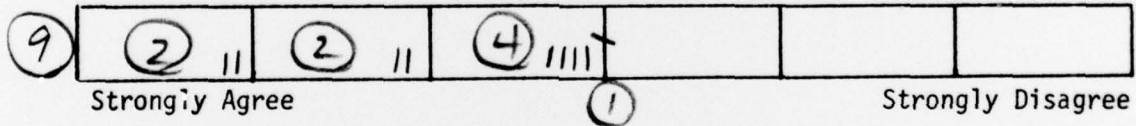
b. Consider a technical service program manager equal to a line battalion commander.



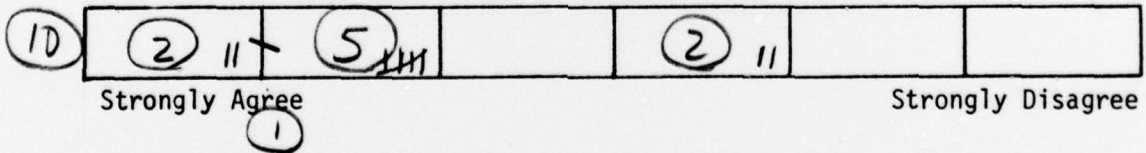
c. Select the program manager over the battalion commander.



d. Select the battalion commander over the program manager.



e. Consider a technical service program manager equal to a technical service battalion commander.



COMMENTS:

7. If established, I feel that officers in the project management career field should:

a. Not return to branch material assignments above the rank of major.

10

		(1)	(2)	(2)	(5)
--	--	-----	-----	-----	-----

Strongly Agree Strongly Disagree

b. Serve in branch material assignments only as staff officers.

10

			(2)	(4)	(4)
--	--	--	-----	-----	-----

Strongly Agree Strongly Disagree

c. Serve in branch material assignments as commanders.

10

(3)	(1)	(5)	(1)		
-----	-----	-----	-----	--	--

Strongly Agree Strongly Disagree

d. Serve only as Deputy Project Managers to provide expertise to Project managers selected from officers with an operational/ command background.

10

(1)		(1)	(3)	(4)	(1)
-----	--	-----	-----	-----	-----

Strongly Agree Strongly Disagree

e. Specialize in project management upon completion of branch material company command.

10

(1)	(1)	(2)		(3)	(3)
-----	-----	-----	--	-----	-----

Strongly Agree Strongly Disagree

COMMENTS:

8. If you were responsible for selecting a new project manager to replace an unsuccessful project manager and correct deficiencies in the overall program, would you:

a. Select an officer in the project management career field who has demonstrated success in previous project management positions

9			2	1	4	2
	Strongly Disagree			Strongly Agree		

b. Select a line officer who has demonstrated success in previous line assignments to include battalion command.

9			3	2	3	1
	Strongly Disagree			Strongly Agree		

c. Select an officer who is a known "problem solver and expediter" regardless of previous experience.

9			1	1	3	4
	Strongly Disagree			Strongly Agree		

COMMENTS:

9. Indicate the relative importance of each type of experience listed below for a project manager. (Use 1 for the most important and 5 for the least important.)

2 | 3 | 2 | 2 | 3 | 4 | 5 a. Operational experience.

1-2, 2-4, 3-2, 4-1, 5-1

3 | 2 | 3 | 5 | 3 | 2 | 5 | 2 | 3 b. In a project office. (Not the project manager)

1-0, 2-3, 3-4, 4-0, 5-3

1 | 4 | 2 | 1 | 1 | 1 | 3 | 2 c. Command experience.

1-6, 2-2, 3-1, 4-1, 5-0

4 | 3 | 5 | 4 | 2 | 4 | 1 | 1 d. As a manager of a small project office.

1-4, 2-1, 3-1, 4-3, 5-1

5 | 4 | 5 | 4 | 3 | 3 | 3 | 2 | 5 | 4 e. General staff experience.

1-0, 2-1, 3-3, 4-3, 5-3

COMMENTS:

ANNEX E

Statistical Analysis

RESULTS OF  
KOLMOGOROV-SMIRNOV TEST

Listed below are the results of the Kolmogorov-Smirnov Test: The calculations were done in a normal statistical manner for this test.

NULL HYPOTHESIS

Ho = Each of the six blocks would receive one-sixth of the scores in a random answer which indicated no group

<u>Question</u>	<u>Reject Ho</u>	<u>Accept Ho</u>	<u>Probability of Occurrence</u> *
1. a	X		.01
b		X	
c	X		.10
d		X	
e	X		
2. a	X		
b	X		
c	X		
d	X		
3. a	X		
b	X		
c	X		
d	X		
4. a	X		
b	X		
c	X		.05
d	X		
e	X		
5. a	X		
b		X	
c		X	
d	X		
e	X		.05

(\*When not indicated, the probability of occurrence is .01.)

		<u>Reject</u> <u>Ho</u>	<u>Accept</u> <u>Ho</u>	<u>Probability of</u> <u>Occurrence</u>
6.	a	X		
	b	X		
	c	X		
	d	X		
	e	X		
7.	a	X		
	b	X		
	c	X		
	d	X		
	e	X		
8.	a	X		
	b		X	
	c	X		

LIBRARY  
DEFENSE SYSTEMS-MANAGEMENT SCHOOL  
BUILDING-2022  
FORT BELVOIR, VIRGINIA 22060