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A study of the monetary value of the master's degree in management issued by the Naval Postgraduate School

Andrilla, Joseph John

Monterey, California ; Naval Postgraduate School



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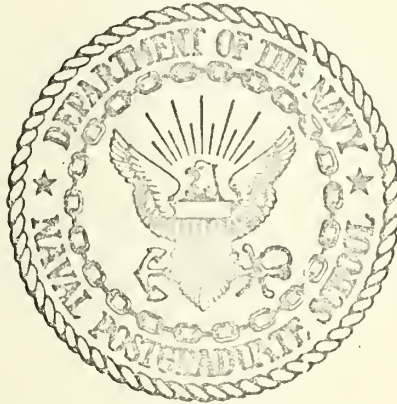
A STUDY OF THE MONETARY VALUE OF THE MASTER'S
DEGREE IN MANAGEMENT

by

Joseph John Andrilla

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United States
Naval Postgraduate School



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A STUDY OF THE MONETARY VALUE OF
THE MASTER'S DEGREE IN MANAGEMENT ISSUED
BY THE NAVAL POSTGRADUATE SCHOOL

by

Joseph John Andrilla
Bernard James McGee

December 1970

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A Study of the Monetary Value of
the Master's Degree in Management Issued
by the Naval Postgraduate School

by

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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
December 1970

ABSTRACT

A survey of attitudes and opinions held by various industrial companies was conducted to determine; (1) employment opportunities, and (2) possible starting salaries for retired officers holding Master's degrees in Management from the Naval Postgraduate School. A questionnaire was mailed to selected members of the business community and local government agencies throughout the country.

Results showed that over 61% had not heard of the Naval Postgraduate School program. There was a preference for recently graduated civilians over retired officers, although 84% employed retired officers. Forty-two per cent showed expected pay ranges from \$12,000 to \$15,000; twenty-five per cent showed pay range from \$15,000 to \$20,000. The majority indicated that a graduate degree would enhance starting salaries from \$1,000 to \$5,000 annually. Approximately 60% would welcome the receipt of resumes from retired officers.

The report gives a summary of the data and recommends the direction of future research.

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I. INTRODUCTION

A. PURPOSE OF STUDY

Since the end of World War II, the United States has experienced industrial and economic growth unparalleled in the history of mankind. American business know-how has created vast industrial empires which span the globe. This growth and expansion has been brought about by bold and aggressive management. Years ago when corporations were smaller they were normally run either by one man or a small group of men. The size and complexity of today's business environment makes it much more difficult for a one man operation to succeed. There is now need for the management specialist; the financial analyst, the systems analyst, the operations researcher, the production specialist, and the labor relations specialist. Concurrent with the development of all these various specialties has come the advance and growth of educational institutions, and more specifically, the graduate schools of business administration. The recent decade has seen tremendous expansion in these schools; all in response to the growing need for graduates in the business world. Indeed, the degree of specialization now observed in modern business would be more difficult without advanced education and training.

The requirement for advanced education and training has not been confined to the private sector of the economy and is apparent in the public sector as well. The military services have responded by sending many officers for graduate education in business techniques and management.

The military profession is unlike others in many ways, but one point of great divergence is in the relatively young age at which the average

officer terminates his military career. In the age range of 45 to 50, when the average business man is approaching the apex of his career, the military officer is nearing the end of his. In the Navy an officer typically receives graduate education in management after having risen to a managerial position but still with remaining years in the service.

The average officer student at the Naval Postgraduate School in the management curriculum is 33 years of age, holds the rank of Lieutenant Commander and will serve approximately ten to twelve more years on active duty before retiring. An officer receives graduate management education primarily to improve his capabilities while he is in the service; however, just as his experience during his career contributes toward his capabilities for work after retirement, additional management education might also be expected to contribute. Each officer is greatly interested in his employability and earning potential, and questions the value of management education's contribution toward it.

A retiring officer has amassed considerable management experience in his twenty plus years of service. His career specialty may be in engineering, supply, construction, medical/dental, aviation, general line, and others. Despite the fact that these specialty areas differ greatly, all involve management in varying degrees. He has been exposed to some of the most advanced management techniques known to man. He enters the job market at the approximate age of 45 in competition with others of his general age and education, but the comparison stops there. Although the retired military officer has had years of management experience, the potential employer frequently views him as having operated in a "military vacuum," where his military experience is not relevant to the job he is to fill. Unable to compete in specific civilian management experience, the retiring officer must fall back on the universally accepted

qualification of advanced education. Thus, the officer who is contemplating post-retirement employment must consider the marketability of his education; more specifically, the commercial value of his Master of Science degree.

The objectives of this study are: (1) To provide a measure of attitudes and opinions held by various members of the business community regarding graduates of the management curriculum of the Naval Postgraduate School, and (2) To determine the commercial value of the Master of Science degree in Management for the retiring officer.

II. RESEARCH PROCEDURE

A. QUESTIONNAIRE DESIGN

A questionnaire (Appendix A) was developed to test the opinions of prospective employers concerning the employability of retiring Naval officers in their organizations. In the development of the questionnaire, considerable effort was directed toward designing a short form. The advisability of this course was supported during the test and evaluation segment of the design period. During this time, the entire package was presented to the local personnel representatives of several prominent firms representing different industries. Response indicated that the longer the questionnaire, the lower the probability that the recipient even read it, much less answer it.

For the questionnaire package, the resume of a typical retired Naval officer proved difficult to design. It will be noted that the billets indicated are those filled by surface officers, aviators, or supply officers. Since these three communities are the largest, it was felt that the maximum number of average situations could be covered by mentioning some billets that these officers might normally be assigned. The goal was to provide the respondent with a general understanding of the level of responsibility and management experience gained by an officer during the course of his career.

A copy of the curriculum indicating the various available sub-specialty areas was also included to provide the respondent with an appreciation for the diversity afforded the student and to assist in the evaluation of the curriculum itself. In addition, it was felt that this

information would provide additional insight for the respondent to make a judgment regarding the academic qualifications an officer would have to build on in tours following that at the Postgraduate School.

In addition to the major goals of the study a number of sub-goals were established and pertinent questions included in the questionnaire.

These sub-goals were as follows:

- ✓ 1. To determine attitudes toward retired officers vis-a-vis the more recent college graduate in a job selection situation.
- ✓ 2. To uncover opinions regarding the management curriculum at the Naval Postgraduate School and to solicit recommendations for possible changes.
- ✓ 3. To determine what general types of positions might be available to the retired officer.
4. To determine if the firms employed retired officers, and if not, why not.
5. To determine what criteria are used in making decisions to hire management personnel.
6. To measure the amount of additional compensation a retired officer might expect by virtue of possessing a graduate degree.
7. To gain some appreciation for how many companies would desire retiring officers to submit resumes for job applications.

The final questionnaire package consisting of: (1) an introductory letter; (2) a typical retired officer's resume; (3) Information on the Management Curriculum; and (4) the questionnaire itself was mailed to 358 addressees comprised of selected business enterprises, public utility companies, and state and local civil service commissions. Of the business enterprises, the top 325 were selected from Fortune magazine, which annually lists the 500 largest corporations in the United States. The utility companies and civil service commissions were selected to cover representative geographic sections of the United States. The questionnaire was mailed on August 18, 1970. Replies were received until October 9, 1970.

B. ANALYSIS OF REPLIES

To assist in analyzing the replies to the questionnaire a computer program was devised to compute percentages and compare answers. The first section of the program totaled the answers to each question and computed a percentage which represented the number of respondents making that particular reply. The computer was then instructed to accumulate and convert to a percentage the number of respondents who preferred the retired officer (question #2), had retired officers employed (question #5), and companies who wanted to receive resumes (question #11). These aforementioned percentages were then separated into the categories of companies who had previously known of the Naval Postgraduate School or its graduates prior to receipt of the questionnaire, and those who had not known of the school. The program then listed the respondents who preferred retired officers (question #2), the salary offered, value of the M.S. degree, and if the respondent wished to receive resumes from retired graduates.

The next segment of the program computed the percentages of respondents who had retired officers employed and still wished to receive resumes. Also, this section gave the percentage who had no retired officers employed and who now desired resumes. The next answer gave the percentage of the respondents who preferred retired officers or had no preference and the salary ranges that were offered.

The final segment of the program computed the percentage of respondents who indicated that they preferred the younger student, had internal promotion policies, and were primarily concerned with work experience as opposed to educational experience coupled with management experience of another type, such as that possessed by a retired military officer.

III. DISCUSSION

A. GENERAL RESPONSE TO QUESTIONNAIRE

Of the 358 questionnaires mailed, 136 were returned. Of the total returned, 113 were usable. There were 17 anonymous replies. Several respondents did not answer the questionnaire, but returned letter replies instead. Although these were not statistically useful, the information contained provided considerable insight into the company's policies.

The following summarizes replies to each question:

1. Previous knowledge of NPS?	Yes - 37.2%
	No - 61.9
2. Prefer retired graduate of NPS?	13.3
Prefer younger student with similar degree	50.4
No preference	33.6
3. No suggestions for improving Management curriculum	83
Add marketing courses	15
Add behavioral courses	2
4. There is an indication that opportunities lie in staff and administrative areas.	
5. Retired officers currently employed	Yes - 84.1
	No - 15.9
6. Primary reason for not hiring retired officers:	
Age	2.7
Lack civilian business experience	12.4
Internal promotion policies	20.4
Other	7.1
No answer	57.4
7. Considerations for evaluating prospects:	
Work experience only	0.9
Primarily work experience	34.5
Work and education equally	57.5
Primarily educational level	7.1
Education only	0.0

8. Should retired officer receive less salary due to retirement income?

Yes	-	3.5%
No	-	94.7
No answer	-	1.8

9. Salary range indicated:

\$ 5 - \$ 7,000	0.0
7 - 9,000	0.9
9 - 12,000	15.9
12 - 15,000	42.5
15 - 20,000	24.8
greater than 20,000	3.5
no answer	12.4

10. Portion of salary attributable to Master's degree:

None	16.8
\$1,000	17.7
2,000	27.4
3,000	18.6
4,000	1.8
5,000	1.8
greater than 5,000	2.7
no answer	12.4

11. Desire resumes from retired graduates:

Yes	-	60.2
No	-	31
No answer	-	8.8

12. Desire brief abstract of results of study:

Yes	-	65.5
No	-	31
No answer	-	3.5

B. SALARY AND THE VALUE OF THE M.S. DEGREE IN MANAGEMENT

The most positive answer given by the respondents was the answer to question #8. More than 94% of the respondents stated that the retired officer should not receive less compensation than another executive filling a similar position. However, the salary range indicated in the answers to question #9 did not always confirm this positive stand. There were 3.5% who thought that retired officers should receive less compensation than another employee filling a similar position, but the majority of these respondents state that this difference in salary was due to

lack of business experience rather than retirement income. The responding official from the National Lead Company stated, however, that it often occurs that a retired officer will be offered less due to retirement income.

With regard to salary offered, the majority of the responses (42.5%) fell into the \$12,000-15,000 range. The lowest salary replies were received from insurance companies, textile manufactures, and retail marketing firms. The following four companies indicated that they might offer a salary of greater than \$20,000: Getty Oil, IBM, Inland Steel, and Litton Industries. Detailed salary response information is shown in Appendix B.

That portion of the salary that could be attributed to the M.S. degree in Management from the Naval Postgraduate School averaged \$2,000. Of the respondents, 16.8% replied that the M.S. degree did not account for any part of the salary range. Jewel Companies, Incorporated gave the following reasons for not placing a dollar value on the Master's degree:

"While possession of a Master's Degree in Management enhances the applicant's attractiveness, the key factors are the individual's technical competence, his ability to administer, work with, and relate to people. Assuming the job in question was at a relatively high level, having a Master's Degree plays only a minor part in the consideration."

Another company which placed a very low value on the Master's degree was the Pacific Gas and Electric Company. This company indicated a salary range of \$9,000-12,000 and made the following comment in a covering letter:

"As we have indicated in your questionnaire, we do employ retired military officers and we certainly would be interested in interviewing those who would like to find a second career in the utility industry. I do want to emphasize, however, that my company is primarily interested in those officers who are willing to enter an entry-level management position, since most of our vacancies are at this level. We have been

very successful in the past in developing our own managerial talent to assume higher level positions with the company. Only occasionally do we look outside for candidates who can fill higher level positions."

As a general comment concerning the hiring of individuals holding graduate degrees, the United States Steel Corporation stated:

"Our need for men with Master's degrees in Management or business administration is minimal. That is, we recruit only three to six a year as against hundreds of management trainees with bachelor's degrees only. We have found it difficult to meet the aspirations and expectations of a top-flight MBA, to absorb him into the organization structure, or to meet his starting salary demands, within our scheme of things."

C. ATTITUDES TOWARD RETIRED GRADUATES

In response to question number two, roughly half (50.4%) of the respondents indicated a preference for the younger graduate, and 13.3% showed a preference for the retired officer, while the remaining 33.6% left the question unanswered or wrote in "no preference" or words to that effect. The inference drawn from this response was that a potential employer would prefer to take a younger man and train him in his company's policies rather than retrain a 45 year old man. The New York State Department of Civil Service stated::

"For most positions requiring only a degree, preference would probably be given to the student just receiving such a degree. Our experience indicates that the older candidate does not relate as well to an internship-type of situation as do younger people."

The foregoing statement by Pacific Gas and Electric Company brought out an important problem facing the retired officer. Of all the respondents, 50.4% checked that they prefer the younger student over the retired officer in a hiring situation. The younger student would accept an entry-level position and the salary attached to that position. The retired officer normally expects more salary and more responsibility. Carrier Air Conditioning Company stated that they do not normally hire

retired officers because "they are unwilling to step down from either salary or command levels and attitudes." Genesco Incorporated stated that they were flooded with 25 year old M.B.A's and would not offer a retired officer graduate a position in their firm. From the attitude of these respondents, it was apparent that the companies could procure the same educational level in a younger candidate for less salary. The Kelsey-Hayes Corporation put it this way:

"The Master's Degree is more useful to the beginner in telling us what his potential may be. The older man has extensive experience on which we rely to make our evaluation. The Master's Degree then isn't so much rewardable per se, but rather opens doors that might not otherwise open."

Despite apparent preference for the younger man, however, in answer to question number five, 84.1% indicated that they had retired officer personnel currently employed. This suggested the possibility that if indeed there was a "policy" regarding the age of new employees, the retired officer could muster sufficiently impressive credentials to allow relaxation of this policy. A major difficulty in determining the correct evaluation of these data was that the management level at which these retired officers were hired was unknown.

In answer to question number six concerning reasons for not hiring retired officers, 50% of the respondents indicated that the major reason for not doing so was because of internal promotion policies. Many of the returned questionnaires had comments written beside the question concerning the importance they attached to their long standing policies of promotion from within and the beneficial effects such policies were presumed to have had on the morale of their junior management employees. Another 25% of these respondents indicated that lack of civilian business experience was the primary impediment to their hiring retired officers.

This was particularly true of merchandising companies and those companies whose lines of business were highly specialized.

In making a decision to hire, more than half (57.5%) of the respondents showed that both work experience and educational level were considered about equally. This indicated that a careful evaluation of the potential employees total background would have to be considered before any hiring decision was made. In addition, 34.5% answered that they were concerned primarily with work experience in making their hiring decision. It was of interest to note that all of those who had answered that lack of civilian experience was the primary reason for not hiring retired officers responded in this manner.

Respondents indicated that the retired officer was suited for many and varied positions. The most frequently mentioned were in the areas of staff assistant, administration, and financial management. From the general answers to question number four, it was not possible to determine the level of the administrative or financial position that would be offered. Some respondents were addressing higher or middle management positions and others were assuming that the retired officer was suited only for intern-type management training. The defense oriented industries stated that the retired officer would be most suited for contract administration and marketing type positions. These industries would be interested in the retired officer for his experience in military procurement.

Most of the respondents (60.4%) would like to receive resumes from retired graduates of the Naval Postgraduate School. In this time of relatively high unemployment, this figure seemed encouraging. Many of these firms still showed a preference for the younger student, even

though they indicated a desire to receive resumes. The following companies desired resumes and also preferred officers to younger students:

SALARY RANGE AND COMPANY

\$9,000 - \$12,000	\$12,000 - \$15,000	\$15,000 - \$20,000
Hammermill Paper Co.	Ingersoll Rand Co. Donnelly Corporation City of St. Louis Burroughs Corporation Foremost Foods	Addressograph Multigraph Bell Aerospace Consolidate Freightways Alcan Aluminum

D. RECOMMENDED CHANGES TO THE MANAGEMENT CURRICULUM

Seventy-one respondents had no recommendations to improve the management curriculum. Many of these companies made generally praiseworthy comments about the course content and length of the program. One respondent commented that the length of the program did not appear adequate:

"MBA programs from the top schools will often be a two year (six quarter) program. This is very important for non-business undergraduates. Your program would seem to be a minimum length."

The lack of sales or marketing courses was the prime complaint of the majority of those respondents who had some criticism of the program. It was felt that the reasons for this were fairly obvious and that sales and marketing were not generally applicable to the military sector, but it was equally obvious that the absence of these courses reflected greatly on the answers received. Pet Foods Incorporated said:

"One or two graduate level courses in marketing would be most desirable for the business environment, as marketing and sales is the 'name of the game' in the business world."

The National Lead Company questioned the methods of instruction and the course presentation methods. This type of question might be asked to any institution of higher learning and depends mostly on the caliber and ability of the faculty. On the whole, however, the respondents generally felt the curriculum was excellent and they had very few recommendations for improvement.

IV. COMMENTS AND OPINIONS

A. LIMITATIONS OF THE QUESTIONNAIRE

Several deficiencies and limitations to the questionnaire are recognized. For example, in question number one, where 60% of the respondents indicated that they had no prior knowledge of the existence of the Postgraduate School, there was no way to assess the degree to which they were impressed either by the curriculum or by past contact with retired officers.

Limitations were also imposed by the requirement for brevity. This was particularly relevant with respect to the inability to define the distinctions between entry levels and middle management levels in various positions. In this regard, a comment offered by the Anaconda Company seemed pertinent:

"---the answer to question two depends on the type of job for which we are recruiting. We would prefer a recent college graduate for an entry level position but would be looking for a more mature candidate for a position in middle management. We would not consider a retired officer on the same par with a younger student."

A similar limitation existed in trying to interpret the meaning of the salary range offered. Because it was not possible to assess the level of position a respondent had in mind, it was difficult to draw any meaningful conclusions from the salary range indicated. During the test and evaluation segment of the design phase of the questionnaire, the companies interviewed stated the opinion that the salary question would be most difficult to answer due to many imponderable variables, and, therefore, would be highly suspect. It was also difficult to determine how much more might be paid to the holder of an advanced degree.

B. GENERAL COMMENTS

The economy of the United States was in a generally sluggish condition at the time this survey was conducted. In the latter two quarters of the preceding fiscal year, the Gross National Product had fallen. This survey was in the hands of the respondents, therefore, during the first quarter of fiscal year 1971, a period generally described as a "technical recession." The national unemployment level was about 6% with even higher percentages in some areas, and there was a general slow-down in the private sector of the economy. It is believed that these conditions influenced a large number of the respondents. Many companies stated that they did not wish to receive resumes in response to question number 11 and entered the comment, "at this time" following their answer. Conditions of supply and demand obviously were relevant to this situation; but in this study, no attempt was made to assess their effect.

Many answers did not seem to follow a logical pattern. Some companies indicated that they preferred retired officers, but did not wish to receive resumes. Other respondents answered that they did not believe an officer should receive less salary due to his retirement income, but then proceeded to check a salary range that was in excess of one standard deviation below the mean of \$12,000 to \$15,000.

Some comment must be made about the individuals who actually answered the questionnaires for their companies concerning their personal biases and attitudes. Although only a few respondents divulged their personal biases for or against retired officers or individuals with advanced degrees, there were sufficient written comments on the questionnaires to permit the authors to render an opinion.

It is generally true that higher management positions are filled by meeting the criteria established by top executives in the corporation, and these criteria are not necessarily known by the personnel people doing the screening of candidates. Further, older personnel managers may react differently from younger ones. The college placement specialist, for example, may not respond to an older applicant because of his narrow experience and particular orientation.

C. FUTURE RESEARCH

It is suggested that future research improve the techniques used in study as follows:

1. Obtain the title of the respondent to determine bias.
2. The resume should be on a particular officer in order to permit more precise analysis of the replies.
3. Determine the exact salary that would be offered and the level of management that is represented by that salary.

Additional areas which could be studied are:

1. Question retired graduates of the Naval Postgraduate School rather than companies.
2. Submit questionnaires to the president and personnel director of each firm to determine variances if any.

V. CONCLUSION

The study indicates that the majority of the firms queried had not previously known of the Naval Postgraduate School, and that most preferred recent civilian graduates to retired officers with Master's degrees in Management in a hiring situation. Much of the reluctance to hire retired military officers is because of their lack of civilian business experience, but also derives from the opinion or because many employers feel that military officers would not do well in an environment where they would have to step down from command level positions and attitudes. In spite of this, it was significant that the vast majority of these firms did have retired officers employed.

The study indicates that a graduate of the Naval Postgraduate School with a Master's degree in Management has received an education that may be worth about \$2,000 more annually in starting salary upon retirement. He might expect a starting salary in the \$12,000 to \$15,000 range, and he will likely be hired for a staff or administrative position. Military experience in such fields as data processing, financial management, and operations research could significantly increase the amount of compensation.

APPENDIX A

QUESTIONNAIRE PACKAGE

August 17, 1970

We are writing to you as part of a survey of selected members of the business community, state and local governments to measure, assess, and determine attitudes and opinions you may hold concerning the qualifications of graduates of the U. S. Naval Postgraduate School.

Briefly, the Naval Postgraduate School was established in 1909 to provide officers of the armed services, principally Navy and Marine Corps, with graduate education. The school is fully accredited by the Association of Western Colleges and Universities. Upon completion of the designated curriculum the Master of Science or Ph.D. degree is awarded. Areas of study include Mathematics, Operations Analysis, Engineering, the Physical Sciences, and Management. It is primarily with the latter that this survey is concerned. A copy of the Management curriculum indicating the various optional specialization areas is enclosed for your perusal. Also enclosed is a questionnaire which we hope you will complete and return at your earliest convenience.

With regard to the questionnaire, it is recognized that many subjective judgments are called for, and in many cases, it will be difficult to render an accurate answer. Nonetheless, we request that you make as discriminating an estimate as possible. More specific information is included in the questionnaire itself. If you wish to answer the questionnaire without identifying your company, just omit the company name from the top of the questionnaire.

For your information, the results gathered from this survey will be used as the basis for further academic investigation. If the eventual outcome proves as revealing as we hope, it may be of even greater use to the Navy in planning officer career patterns. Accordingly, your cooperation is most earnestly solicited and will be sincerely appreciated.

Thank you very much.

Very truly yours,

B.J. McGee
LCDR (SC) USN

J. J. Andrilla
LCDR USN

QUESTIONNAIRE INFORMATION

The following information is given to you to assist you in preparing the answers to the questionnaire. The typical retiring officer would have held at least one of the following positions during the course of his career.

RESUME OF TYPICAL RETIRED NAVAL OFFICER

AGE: 42 to 47 years old (Commander or Captain).

EDUCATION: Bachelor Degree in Liberal Arts/Engineering/Business
Master of Management

WORK EXPERIENCE: (Average positions in 20 to 22 years of Naval service.)

- a. Engineering Officer, Destroyer -- manages and directs the department consisting of 90 personnel and an annual budget of \$60,000. (Lieutenant)
- b. DESFLOT Comptroller - staff of 52 personnel, control the fiscal allotments for 26 Destroyers, approve procurement and emergency material requirements to maintain peak operational readiness. (Lieutenant Commander)
- c. Data Processing Officer - Manages the data processing department, staff of 63 (three shifts), medium size computer, languages: FORTRAN IV and COBAL. (Lieutenant Commander/Commander)
- d. Weapons Manager - Project manager responsible for funding and managing contracts for a major weapons system. Determine specifications for research and production; develops requirements for operations and maintenance. (Commander/Captain)
- e. Destroyer Commanding Officer - Totally responsible for operating and maintaining a ship with a complement of 18 officers and 275 men. Manages and directs all operational and administrative functions; exercises direct control over all evolutions at sea, operational use of weapons systems, and general supervision of all fiscal matters pertaining to his ship including an annual budget of \$200,000. (Commander)
- f. Naval Aviator - Commanding Officer of any one of several type squadrons, i.e. fighter, attack, patrol, anti-submarine warfare, which range in size from 200 to 400 officers and enlisted men. Qualified to fly either applicable type of aircraft and would typically accumulate 4,500 - 5,000 flight hours. (Commander)

MANAGEMENT CURRICULUM

DEPARTMENTAL REQUIREMENTS FOR THE DEGREE

MASTER OF SCIENCE IN MANAGEMENT

1. A candidate for the degree of Master of Science in Management must complete satisfactorily either (a) a minimum of 58 quarter hours of graduate level course work or (b) a minimum of 50 quarter hours of graduate level course work and a thesis.
2. Core course requirements at the graduate level must be successfully completed or validated by advanced credit in each of the following areas:
 - Behavioral Sciences,
 - Data Processing,
 - Economics,
 - Financial Management and Accounting,
 - Management Policy,
 - Material Management,
 - Operations Research,
 - Statistics, and
 - Systems Analysis.
3. In addition to the core requirements, each candidate must complete an approved elective sequence, comprising either (a) a minimum of 12 quarter hours of graduate level course work or (b) a minimum of 4 quarter hours of graduate level course work and a thesis pertinent of the area of the elective sequence.

OBJECTIVE AND DESCRIPTION

Objective - To provide officers with increased education in management which will improve their capabilities for organizing, planning, directing, coordinating and controlling activities in which the resources of men, money, and materials are combined to accomplish Navy objectives.

Description - The curriculum is of twelve months duration at the graduate level commencing in January or July. All officers, regardless of designator, are required to participate in the "core" courses. These courses provide the foundation and tools of management and lead into the electives, which permit limited specialization in fields of interest to sponsoring bureaus and agencies.

Classroom instruction is supplemented by a guest lecturer series which affords the officer an opportunity to hear discussions of management topics by senior military officers, business executives, and prominent educators.

MANAGEMENT CURRICULUM

Title
CURRICULUM

<u>Required Courses</u>	<u>Hours</u>
Individual Behavior	4-0
Group and Organizational Behavior	4-0
Computers and Data Processing	3-0
Macro-Economic Theory	4-0
Micro-Economic Theory	4-0
Financial Accounting	4-0
Managerial Accounting	4-0
Management Policy	4-0
Resource Management for Defense	4-0
Operations Analysis for Management	4-0
Mathematics for Management	5-0
Management Statistics	5-0
Systems Analysis	4-0
<u>Elective Courses</u>	
Personnel Management and Labor Relations	4-0
Seminar in Behavioral Science	4-0
Seminar in Organization Theory and Management Practice	4-0
Economic Theory and Macro-Economic Policy	4-0
Economic Theory and Micro-Economic Policy	4-0
International Economic Studies	4-0
Decision Making for Financial Management	4-0
Controllership	4-0
Procurement and Contract Administration	4-0
Management Information Systems	4-0
Business Data Processing	4-0
Quantitative Decision Techniques	4-0
Directed Study	4-0

MANAGEMENT CURRICULUM

Elective Options

<u>Title</u>	<u>Hours</u>
1. <u>Personnel Administration</u>	
Personnel Management and Labor Relations	4-0
Seminar in Behavioral Science	4-0
Seminar in Organization Theory and Management Practice	<u>4-0</u>
	12-0
2. <u>Economics</u>	
International Economic Studies	4-0
Economic Theory and Macroeconomic Policy	4-0
Economic Theory and Microeconomic Policy	<u>4-0</u>
	12-0
3. <u>Financial Management</u>	
Management Information Systems	4-0
Decision Making for Financial Management	4-0
Controllershship	<u>4-0</u>
	12-0
4. <u>Material Management</u>	
Procurement and Contract Administration	4-0
Economic Theory and Macroeconomic Policy	4-0
Economic Theory and Microeconomic Policy	4-0
or	
Decision Making for Financial Management	4-0
Controllershship	<u>4-0</u>
	12-0
5. <u>Quantitative Analysis</u>	
Management Information Systems	4-0
Business Data Processing	4-0
Quantitative Decision Techniques	<u>4-0</u>
	12-0
An additional elective course in the Management area is:	
Directed Study	4-0

QUESTIONNAIRE

COMPANY NAME _____ DATE _____

1. Have you had any previous knowledge of the Naval Postgraduate School or its graduates prior to receiving this questionnaire? Yes No

2. Would your company prefer a retired officer with an MS degree in Management from the Naval Postgraduate School or a student right out of college with an equivalent degree? retired officer younger student

3. After looking at the curriculum for a degree in management (attached), what courses or areas of management would you suggest to make the retired officer more acceptable for employment in your company?
(please specify) _____

4. What type of position do you feel that an officer with a degree in Management from the Naval Postgraduate School is best suited? (refer to the curriculum)
(please specify) _____

5. Does your firm have retired officer personnel employed at the present time?
 Yes No

6. If your company does not hire retired officer personnel, the primary reason is:
(check one answer)
 age of the retired officer
 lack of civilian business experience
 too old for company retirement plan
 internal promotion policies
 other (please specify) _____

7. In making the decision to hire, would your company be more concerned with the educational level or work experience of the officer? (check one answer)
 a. work experience only
 b. primarily work experience
 c. work and education considered equally
 d. primarily educational level
 e. educational level only

8. Do you think a retired officer should receive less salary than another executive filling a similar position because of his retirement income?
- Yes No
9. If you received the attached resume, what salary range would you offer providing that you had a position open?
- \$5,000 to \$7,000
 \$7,000 to \$9,000
 \$9,000 to \$12,000
 \$12,000 to \$15,000
 \$15,000 to \$20,000
 greater than \$20,000
10. Of the salary range indicated above, what portion is attributable to the applicants possession of a Masters' Degree in Management? (check one answer)
- | | |
|----------------------------------|---|
| <input type="checkbox"/> None | <input type="checkbox"/> \$4,000 |
| <input type="checkbox"/> \$1,000 | <input type="checkbox"/> \$5,000 |
| <input type="checkbox"/> \$2,000 | <input type="checkbox"/> greater than \$5,000 |
| <input type="checkbox"/> \$3,000 | |
11. Would you like to have graduates of the Naval Postgraduate School submit resumes to your company upon retirement?
- Yes No
12. Do you desire a brief abstract of the results of this study mailed to you upon completion?
- Yes No

APPENDIX B

COMPANY AND SALARY INFORMATION

PART 1 -- COMPANIES WHO DESIRE RESUMES

<u>Company Name</u>	<u>Salary Range (in thousands)</u>	<u>Value of Degree (in thousands)</u>
1. A. E. Staley Manufacturing Company	12 to 15	2
2. Addressograph Multigraph	15 to 20	2
3. Alcan Aluminum	15 to 20	2
4. Allstate Insurance	7 to 9	none
5. American Enka Corporation	12 to 15	3
6. American Optical Corporation	15 to 20	2
7. Andacoda Company	15 to 20	none
8. Anheuser-Busch Incorporated	12 to 15	2
9. Archer Daniels Midland Company	12 to 15	1
10. Armco Steel Corporation	12 to 15	2
11. Armour-Dial Incorporated	15 to 20	1
12. Beech Aircraft Corporation	9 to 12	1
13. Bell Aerospace Company	15 to 20	2
14. Bendix Corporation	12 to 15	2
15. Bethlehem Steel Corporation	--	--
16. Burroughs Corporation	12 to 15	2
17. City of Dallas	12 to 15	3
18. City of St. Louis	12 to 15	2
19. Comsat Corporation	15 to 20	5
20. Consolidated Freightways	15 to 20	3
21. Control Data Corporation	12 to 15	1

<u>Company Name</u>	<u>Salary Range (in thousands)</u>	<u>Value of Degree (in thousands)</u>
22. Deere and Company	15 to 20	none
23. E. I. Du Pont and Company	12 to 15	1
24. E. R. Squibb and Sons, Incorporated	12 to 15	3
25. Firestone Tire and Rubber Company	12 to 15	2
26. Foremost Foods Company	12 to 15	3
27. General Foods Corporation	12 to 15	1
28. General Telephone Company of Florida	12 to 15	1
29. General Telephone Company of Midwest	9 to 12	none
30. General Telephone Company of Northwest	--	--
31. Getty Oil Company	greater than 20	greater than 5
32. Gulf Oil Company	9 to 12	1
33. Hammerrill Paper Company	9 to 12	1
34. Honeywell Incorporated	--	--
35. I.B.M. Corporation	greater than 20	none
36. Ingersoll-Rand Company	12 to 15	3
37. Jewel Companies	--	--
38. Kaiser Industries	12 to 15	3
39. Kellogg Companies	12 to 15	--
40. Lear Siegler, Incorporated	12 to 15	3
41. Levi Strauss and Company	--	--
42. Litton Systems Incorporated	greater than 20	none
43. Mead Corporation	15 to 20	none
44. Miles Laboratories Incorporated	12 to 15	1
45. Motorola Incorporated	15 to 20	2
46. Northrop Corporation	12 to 15	1
47. Oscar Mayer and Company	15 to 20	3

<u>Company Name</u>	<u>Salary Range (in thousands)</u>	<u>Value of Degree (in thousands)</u>
48. R. R. Donelley and Sons	12 to 15	5
49. Rand Corporation	15 to 20	3
50. Reynolds Metals	--	--
51. Samsonite Corporation	9 to 12	2
52. Smith Kline and French	15 to 20	3
53. St. Regis Paper Company	12 to 15	1
54. State Farm Insurance	9 to 12	2
55. State of California	9 to 12	1.
56. State of New York	12 to 15	2
57. State of Oregon	15 to 20	none
58. State of Pennsylvania	12 to 15	5
59. State of Wisconsin	12 to 15	2
60. Sundstrand Corporation	12 to 15	1
61. Sybron Corporation	15 to 20	3
62. T. R. W. Incorporated	15 to 20	2
63. Texas Instruments	12 to 15	3
64. U. S. M. Corporation	12 to 15	2

PART 2 -- COMPANIES WHO DO NOT DESIRE RESUMES

1. Aluminum Company of America	15 to 20	4
2. American Cyanamid Company	--	--
3. American Oil Company	12 to 15	2
4. Campbell Soup Company	--	--
5. Carrier Air Conditioning	12 to 15	none
6. Celanese Corporation	--	--
7. Chesapeake & Potomac Telephone Co.	9 to 12	none

<u>Company Name</u>	<u>Salary Range (in thousands)</u>	<u>Value of Degree (in thousands)</u>
8. Cotton Producers Association	9 to 12	none
9. Dun and Bradstreet	15 to 20	3
10. Ex-Cell-0 Corporation	12 to 15	none
11. Federal Mogul	12 to 15	1
12. General Dynamics	12 to 15	3
13. General Motors	9 to 12	2
14. Genesco Incorporated	--	--
15. H. J. Heinz Company	15 to 20	none
16. Hewlett-Packard Corporation	15 to 20	2
17. Inland Steel Company	greater than 20	3
18. Interlake Incorporated	12 to 15	2
19. Kelly-Springfield Tire Company	--	--
20. Kelsey-Hayes Company	15 to 20	none
21. Kerr McGee Corporation	12 to 15	2
22. Kimberly-Clark Corporation	12 to 15	none
23. McDonnell Douglas	12 to 15	2
24. National Lead Company	15 to 20	5
25. New England Telephone	12 to 15	1
26. Pacific Gas and Electric Company	9 to 12	1
27. Pacific Telephone Company	--	--
28. Pet Incorporated	12 to 15	none
29. Phillips Petroleum	12 to 15	1
30. State of Maryland	9 to 12	2
31. State of North Carolina	9 to 12	1
32. State of Utah	--	--
33. Swift and Company	--	--

<u>Company Name</u>	<u>Salary Range (in thousands)</u>	<u>Value of Degree (in thousands)</u>
34. U. S. Plywood-Champion Papers	12 to 15	4
35. Union Carbide Corporation	--	--
36. W. T. Grant Company	9 to 12	1
37. Whirlpool Corporation	15 to 20	none

NOTE: There were 12 anonymous responses that were not included in this list.

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13. ABSTRACT <p>A survey of attitudes and opinions held by various industrial companies was conducted to determine; (1) employment opportunities, and (2) possible starting salaries for retired officers holding Master's degrees in Management from the Naval Postgraduate School. A questionnaire was mailed to selected members of the business community and local government agencies throughout the country.</p> <p>Results showed that over 61% had not heard of the Naval Postgraduate School program. There was a preference for recently graduated civilians over retired officers, although 84% employed retired officers. Forty-two per cent showed expected pay ranges from \$12,000 to \$15,000; twenty-five per cent showed pay range from \$15,000 to \$20,000. The majority indicated that a graduate degree would enhance starting salaries from \$1,000 to \$5,000 annually. Approximately 60% would welcome the receipt of resumes from retired officers.</p> <p>The report gives a summary of the data and recommends the direction of future research.</p>			

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KEY WORDS

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