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 by
 Dana Allen Goward
 December 1981

Thesis Co-Advisors: J. Senger
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Career Orientations of Coast Guard Aviators

by

Dana Allen Goward
Lieutenant, United States Coast Guard
B.S., United States Coast Guard Academy, 1974

Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT

from the

NAVAL POSTGRADUATE SCHOOL
December 1981

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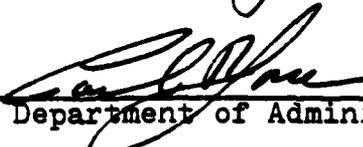
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ABSTRACT

Individuals within the same profession often have widely different career orientations. Some think of themselves mostly as professional specialists while others regard themselves as primarily members of the organization. The goal of this study was to examine the career orientations of Coast Guard pilots and the feasibility of establishing a limited duty officer (LDO) career path for aviators in which pilots would be assigned to flight duties for their entire twenty year career.

A conservative analysis of the data indicated that 19 to 20 percent of the total aviator population would be willing to participate in an LDO program. Willingness to participate in an LDO program was found to vary significantly with (1) how an individual identified himself as a pilot or an officer, (2) commissioning source, (3) interest in becoming a unit instructor pilot, (4) perceived optimal tour length, and (5) rank.

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I. INTRODUCTION

An understanding of the way in which Coast Guard pilots view their careers is important to efficient aviation personnel management. Whether they consider themselves to be mostly pilots, officers, professionals, specialists, or something else, is important to the proper formulation of any number of personnel policies. One area in which this is particularly important is in the consideration of a Coast Guard limited duty officer aviator (LDO) program that has been proposed. As presently envisioned, participants in this program would be guaranteed assignments involving flight operations for their entire career, and would not advance in rank beyond lieutenant commander.

The purpose of this study is to examine the ways in which Coast Guard aviators view their careers as officers and pilots.

The objectives of the study are:

1. To determine the proportion of the Coast Guard aviator population that would be willing to participate in an LDO program.
2. If a sizable group is found, to examine its composition and determine what variables are related to the willingness to participate in such a program.
3. To make a cursory examination of the following related questions:
 - a. Are potential program participants amenable to longer tours of duty?
 - b. How important is achieving status as a pilot through advanced pilot ratings to the potential LDO?

- c. Can willingness to participate in an LDO program (and therefore career orientation) be predicted by a vocational interest inventory?

Willingness to participate in a limited duty officer program would seem to be a function of whether an individual viewed his career in the Coast Guard as primarily that of a pilot or an officer, a professional specialist or a manager. The phenomena of highly trained specialists functioning in bureaucratic organizations appears to be well described by the cosmopolitan/local model of career orientation developed by Alvin Gouldner at the University of Minnesota. This personnel model appears to be an appropriate one about which to structure this study.

A. BACKGROUND: THE OFFICER/PILOT DUALITY

One of the continuing sources of discussion and disagreement in military ready rooms everywhere is the dual role of the military aviator. An aviator must be both a quasi-technical specialist in the operation of his aircraft and execution of operational missions, and an administrator/manager in the performance of his collateral duties. While singly each of these roles could easily demand an officer's full attention, the military aviator is tasked with simultaneous performance of both. This can be a source of conflicting loyalties, unfair demands and frustration.

Of all the services, this problem is perhaps most readily apparent in the Coast Guard. While the aviation units of other

services are almost always located on large military bases and are surrounded by concentric layers of support, the administration of which is left to others, Coast Guard units are usually isolated from other military activities. Consequently they must be responsible for a wide variety of self-support functions in addition to their operational missions. Coast Guard pilots much earlier in their careers are tasked with more demanding and less aviation-relevant collateral duties than their counterparts in other services as a result. This early initiation causes the operator/administrator role conflict to be both pronounced and virtually continuous throughout a Coast Guard pilot's career.

Studies of other occupational groups, especially those commonly thought of as professions, have shown that these conditions often give rise to two distinct and identifiable job attitudes or orientations among the individuals involved. Some become more involved in their operational specialty, seeking achievement and job satisfaction through activities directly related to it. A commonly used example of this orientation is the medical doctor on the staff of a hospital whose sole interests are the healing of patients and the elimination of disease. He or she would typically identify much more with other doctors than with the hospital administration, be likely to submit articles to medical journals on a regular basis, and seek approval and status from peers. This type of orientation is commonly called "cosmopolitan."

On the other hand, some individuals identify more with their organization than their specialty. This orientation is usually called "local." To continue the doctor example, a "local" doctor would probably be less interested in perfecting the art of medicine and more in proper hospital administration and procedures. Rather than becoming widely known as a medical authority, the local doctor would seek to eventually become head of the hospital. It is important to note that the local and cosmopolitan doctors may not necessarily differ in medical competence. Where they do differ is in their attitudes toward their careers and in which arena they seek achievement, recognition and job satisfaction (Landsbury, 1978).

One of the methods of accommodating contrasting career orientations among professionals and specialists in many organizations has been the establishment of dual career paths. A scientist, for example, can often choose, at various points in his career, to either stay in research or move into management. Staying in research would mean promotions as a scientist, increased opportunities to do independent projects, gains in prestige through increases in professional competence, and the absence of most administrative duties. If a move into management was selected, the scientist would use his professional background in the administration of laboratories and management of research programs. When dual paths are available, individual career needs can be satisfied while at the same time the organization gains from more effective utilization of its human resources (Thompson, 1961).

Not all occupational groups are split with significant proportions of their membership having contrasting orientations. Studies have shown that almost all engineers, for example, envision themselves rising within the managerial (rather than professional) structure of their organizations at some point in their careers (Goldner and Ritti, 1970; Shepherd, 1961). Whether or not a significant division of locals and cosmopolitans exists in the field of aviation has never been shown or even addressed. This may be due in part to the fact that commercial pilots are rarely tasked with administrative duties and are employed exclusively in a cosmopolitan role, i.e., flying an aircraft. Similarly, military aviators are normally assigned primarily flight and flight-oriented responsibilities during their first few tours of duty. Traditionally high attrition among junior and mid-grade military pilots may leave only locals in the service. Indeed, there is some indication that those pilots most adept at controlling an aircraft tend to be those least well adapted to the military officer role and most likely to attrite (Rickus et. al., 1968). Retention studies (discussed in detail later) have also hinted that cosmopolitan personalities are more prone to leave the service. Thus it may be that the two major employers of pilots, the airline industry and the military, have relatively homogeneous populations of aviators with contrasting career orientations. The lack of opposing orientations within each group could explain the absence of work in this area.

Contrasting this view is the argument that the existence of dual career paths necessarily indicates coexistence of cosmopolitan and local orientations. The existence of the Army warrant officer and Navy limited duty officer programs for pilots might indicate that military pilots are indeed divided in the way they view their careers. However, these programs were probably established more as a method of resource allocation than to serve individuals' career aspirations. The existence of these programs might therefore be less of an indicator than appearances would suggest.

B. HYPOTHESES

In order to meet the stated objectives of the study and to examine related issues systematically, the following hypotheses will be examined.

1. Hypothesis 1

More than fifteen percent of the population are willing to participate in a limited duty officer program in which participants are not advanced in rank beyond lieutenant commander (referred to hereafter as simply "an LDO program").

The minimum participation required for the LDO program now under consideration by the Coast Guard is thirteen and one half percent (Holemon, 1980). Rounding this up to fifteen percent provides a degree of conservatism and respectable margin of error.

2. Hypothesis 2

Willingness to participate in an LDO program is a function of an individual's career orientation and varies directly with cosmopolitan traits.

Testing this hypothesis will also provide a test of the project's conceptual model. Although the model seems appropriate in every way, it may not be applicable to this particular situation or to the Coast Guard Aviator population.

3. Hypothesis 3

Individuals that have not been selected on schedule for the next highest grade will be more likely to participate in an LDO program than others.

Specialty career paths offer alternate definitions of success to those within the organization who are either unwilling or unable to succeed in the conventional organizational terms of promotions and pay raises. An LDO program, then, should be more attractive to those officers who have not been routinely promoted with their peers. This is also an important issue as the attractiveness of the program to officers who have not been routinely promoted could seriously impact upon the credibility and desirability of the LDO program from the perspectives of both other potential participants and organizational decision makers.

4. Hypothesis 4

Willingness to participate in an LDO program is a function of rank.

It would be expected that the longer an individual has been with an organization the more socialized into it he would become and the more he would identify with it. Similarly, it could be expected that individuals who have been more successful in organizational terms (promotions) will tend to identify with it more than others.

5. Hypothesis 5

Willingness to participate in an LDO program is a function of commissioning source.

It is anticipated that career orientation, and therefore willingness to become an LDO, will vary with commissioning source because of the variance in socialization and organizational attachment between the several sources. Academy graduates, for example, experience a greater period of training and socialization than do other officers. It could be expected that they would tend to local career orientations and be less likely to want to participate in an LDO program. Aviators originally commissioned as officers and pilots in other services, however, would be expected to be oriented more as cosmopolitans. This, if for no other reason than that they have already left one organization while remaining in the same profession.

6. Hypothesis 6

Individuals willing to participate in an LDO program prefer longer tours of duty than do other officers.

Geographic mobility in the military is associated with upward mobility in the organization. Individuals less concerned with upward mobility should therefore be more amenable to longer tours of duty, especially considering the financial hardships of relocation.

7. Hypothesis 7

Achieving status as a pilot through advanced qualifications is significantly more important to potential LDOs than to others.

Assuming that the desire to become an LDO is a cosmopolitan trait, LDOs should prefer achievements within the field of flying more than their local counterparts.

8. Hypothesis 8

Willingness to participate in an LDO program (and therefore career orientation) can be predicted using the Strong-Campbell Interest Inventory.

Conflicting career orientations represent distinct sets of career interests. As the Strong-Campbell Interest Inventory is designed to measure and distinguish between different career interests it should be able to discriminate between locals and cosmopolitans in the same profession.

II. LITERATURE REVIEW

A review of the literature reveals no work in the specific area of pilot career orientation. Much study has been done, however, of local and cosmopolitan orientations in other career fields and of military pilot job satisfaction and motivation. In order to gain a proper background for this study, it is necessary to review work in both these areas.

In reviewing the literature it will be assumed that Coast Guard pilots do not differ significantly from pilots of other services in terms of motivation and job satisfaction. This is a fairly safe assumption as Coast Guard aviators are selected for training by the same criteria and tests used by other services and undergo flight training alongside their Navy and Marine counterparts. It is also a necessary assumption if motivational factors are to be considered in this study as few, if any, studies of Coast Guard pilots have been done.

A. CAREER ORIENTATION

The local/cosmopolitan phenomenon has been established by most writers as occurring primarily within professional groups (Francis and Stone, 1956; Gross, 1958; Corwin, 1961; Hall, 1968). Unfortunately there has been little agreement among sociologists as to what exactly constitutes a profession. In his review, for example, Landsbury cites some fifteen separate studies of occupations with as many definitions of "profession."

Several common elements were noticed, however, in most all of the definitions (Cogan, 1953; Vollmer and Mills, 1966). These were that a profession:

1. Is based on extensive training in a complex field of knowledge.
2. Involves practical application of that knowledge.
3. Is service oriented.

Using these criteria, military aviation could easily qualify as a profession. Flight training averages more than a year in length and is normally followed by a lengthy internship. Military pilots must be schooled in the elements of many disciplines (aerodynamics, structural dynamics, navigation, meteorology, etc.) in addition to the intricacies of the various missions they must perform. This knowledge is practically applied on a day to day basis in providing a service to the surface units they support and to the country as a whole.

It is not enough, however, to demonstrate that military aviation is a profession to conclude that it experiences a significant local/cosmopolitan division within its ranks. Many professions are made up almost exclusively of either all cosmopolitans or all locals. It is necessary, therefore, to examine the specific ways in which locals and cosmopolitans differ and determine if these differences are prevalent among military pilots.

The two opposing career orientations are almost always identified and defined principally in terms of their differences in the following areas:

Identity and Loyalty - Cosmopolitans tend to identify with their professional group, locals with their organizations. Cosmopolitan loyalty is therefore directed more toward colleagues and clients than the hierarchy of the organization. Thus cosmopolitans feel less compelled to support organizational policies, enforce and obey rules, and have few reservations about going outside the "chain of command" (Goldner and Ritti, 1970; Shepherd, 1961; Goldstein, 1958; Sorensen and Sorensen, 1974; Blau and Scott, 1962).

Mobility - Cosmopolitans are much more mobile than locals who are reluctant to sacrifice organizational knowledge and tenure by leaving the organization (Barber, 1965; Dalton, 1950).

Autonomy - Locals generally don't mind relatively close supervision and required adherence to organizational standards while cosmopolitans tend to chafe and balk at them (Kornhauser, 1952; Barber, 1965; Scott, 1968).

Professional Goals - The goals of the organization become the goals of the local. He is therefore more willing to take on a greater range of responsibilities and perform more diverse tasks. Cosmopolitans tend more to their own goals and those of their profession. Consequently they are very reluctant to perform tasks not directly related to the performance of their specialty (Corwin, 1961; Thompson, 1961; Gouldner, 1957; Merton, 1957; Bentz, 1950).

Recognition, Evaluation and Achievement - The cosmopolitan seeks success as a professional. He looks to his peer group

for recognition and approval. The organization is the source of the local's sense of job satisfaction. His achievement is measured in terms of promotions, pay raises, and increases in responsibility (Klatt, 1978; Goldner and Ritti, 1970).

Using these general areas as a guide, pilot motivation and job satisfaction literature can be correlated with what is known about career orientations.

B. PILOT MOTIVATION AND JOB SATISFACTION

1. General

Work in the area of pilot motivation and job satisfaction tends to be divided into two groups. One group consists of psychological studies examining various constructs of the aviator personality. Though many of these offer interesting propositions, such as a suggestion that aviation is a return to the womb because of the closed in ovalness of the fuselage, they offer little insight as to how aviators view their careers (Bond, 1952). Even those studies that have been done with accident prevention as their main goal offer little illumination. One notable exception to this is a study done by Fine and Hartman in 1968. In a report entitled "Psychiatric Strengths and Weaknesses of Typical Air Force Pilots," they comment upon career orientation directly. In describing their subjects they state:

Career interests centered around achievement of competence in flying rather than impulsivity, raw pleasure, or advancement in the organization.
(Emphasis added)

This would seem to be a very strong indicator of cosmopolitan tendencies within the population.

The second group of studies concern retention of military pilots and are regularly conducted, probably because of traditionally high attrition. These studies offer direct insights as to the attitudes of military pilots toward specific aspects of their jobs.

Using the format developed earlier, it can be shown that aviator retention studies reveal a high degree of "cosmopolitaness" among many pilots, especially those leaving the service.

2. Identity and Loyalty

Cosmopolitans identify more with their professional group than with their organization. That some military pilots identify more with aviation than their service is pointedly demonstrated by a 1978-79 survey of pilots leaving the Air Force (Carver, 1979). Significant numbers of this group stated that they "considered themselves pilots first and officers second." Over seventy percent stated they would seek jobs in aviation as civilians. Further evidence of primary identification with aviation was uncovered by a 1966 Navy survey that showed a pronounced "preference for a strictly pilot/flight officer career path as opposed to that of an unrestricted line officer" among thirty-six percent of all the active duty pilots and flight officers polled (Robertson, 1966).

All pilots enjoy flying. Directly associating continuous flight duty and the value of a career, though, is probably

the sign of a cosmopolitan pilot. A 1980 survey of resigning Air Force pilots shows that the inability to fly an entire career was a major factor in this group's leaving the service (Carver, 1980). In another study, seventy-four percent of Marine aviators stated they would "be encouraged to resign" by a non-flying tour of duty (Millard, 1979). The Navy obtained similar results in a 1980 study that found "sufficient flight time (both quantity and quality)..." among the most frequently mentioned factors in pilots' decisions to remain in the service. Conversely it was found that "insufficient flight time (both quantity and quality)..." was a major factor in decisions to leave the service (Sheposh et. al., 1980).

3. Mobility

A greater tendency to change organizations is a recognized trait of cosmopolitans. The mobility of military pilots has been repeatedly demonstrated, at least in their propensity to leave the service. The Navy, for example, lost forty-eight percent of its pilots in 1977. This figure increased to sixty-nine percent in 1979 (NAVPERS, 1979). The Air Force also lost forty-eight percent in 1977 and increased its rate to seventy-three percent in 1979 (Gulick and Lackman, 1980). While other factors may have influenced this high attrition, it is still an indicator of a high degree of mobility.

4. Autonomy

Cosmopolitans tend to have a greater need to work independently than their local co-workers. This attribute is

not specifically revealed in any of the retention studies. This may be because a pilot's job is intrinsically autonomous. Thus a lack of autonomy would not be a significant factor in a decision to leave the service. Several works do, however, cite the individual's lack of control over his future assignments and career in general as demotivating elements and contributors to attrition (Carver, 1979; Millard, 1979; Matthews et. al., 1978). Though this lack of autonomy in career decisions does not apply to the work itself, it may serve as an indicator of cosmopolitan tendencies.

5. Professional Goals

The cosmopolitan tends to pursue his own goals and those of his profession rather than those of the organization. He is less willing to perform tasks outside his specialty area. Two studies of resigning pilots show some evidence of this among military pilots. A 1978 Navy study found that many resignees felt that the needs of the service prevailed unjustly over the needs of the individual (Day, 1979). Resigning Air Force officers shared this feeling (Carver, 1980) and added that their concern for mission readiness did not seem to be shared by senior officers. This same group cited non-aviation related collateral duties as demotivating.

6. Recognition, Evaluation, Achievement

Two studies show that many military pilots have cosmopolitan traits in this area. Resigning Air Force pilots indicated that part of their dissatisfaction with the service

arose with their not being evaluated on their performance as pilots, but rather on miscellaneous collateral duties that were secondary responsibilities (Carver, 1979). A psychological study of Air Force pilots cited earlier also found pilots' achievement motivation to be centered about increased proficiency as an aviator (Fine and Hartman, 1968).

C. CONCLUSION

From the literature available, it can probably be concluded that a significant portion of the military aviator population hold what can be considered cosmopolitan career orientations. The fact that studies of attriting pilots and their reasons for resigning revealed most of the cosmopolitan tendencies, coupled with the organizational success of numerous pilots in the military, provides very strong evidence that many locally oriented pilots exist as well.

III. RESEARCH METHODOLOGY

A. GENERAL

A questionnaire was sent to each of the approximately 850 designated aviators (not including flag officers) serving in the U.S. Coast Guard. The purpose of the survey was to examine cosmopolitan and local career orientations and other related issues among the aviator population. Literature on similar surveys done within other occupational groups suggested many of the survey questions as well as a consistent scoring methodology (Goldner and Ritti, 1970; Sorensen and Sorensen, 1974). One hundred forty copies of the Strong-Campbell Interest Inventory (SCII) were included with questionnaires sent to pilots at several randomly selected units. This was done in the expectation that the vocational interests of cosmopolitan and local pilots would differ significantly and that the SCII results would reinforce those of the questionnaire.

B. SAMPLE

Eight hundred forty-six questionnaires were mailed to individual Coast Guard aviators (the entire population). Of these, 696 were returned completed within three months and were included in the analysis. Sixteen more were returned as undeliverable and one was returned completed but late. This gave a questionnaire response rate of eighty-four percent.

Of the 140 Strong-Campbell Interest Inventories mailed, 103 were returned completed and one returned as undeliverable for a response rate of seventy-four percent. This lower rate was probably due to the additional time (about forty-five minutes) required to complete the SCII.

Judging from the distribution of the biographical data obtained from respondents, non-respondents appeared to have been randomly distributed throughout the population.

C. INSTRUMENTS

1. The Questionnaire

The questionnaire is made up of sixty-four items divided between two sections. Thirty-three of the items are for the purpose of collecting biographical data and comprise the first section entitled "Background Information." The second section, "Opinion and Interest Survey," is made up of the remaining thirty-one items (SURV01 to SURV31) which seek to measure attitudes towards various aspects of a Coast Guard aviation career on five point Likert scales. A copy of the questionnaire annotated for scoring is included as Appendix A. The questionnaire items fall into six major categories. Four of these correspond to areas in which cosmopolitans and locals are known to differ. The remaining two collect background and related information.

a. Question Categories

Background and Introductory - A large amount of biographical information is sought. This includes information on educational background, career experience, and off duty

flight activity. Three "warm up" questions concerning career intentions (retire/resign) and motivation upon joining the service are asked at the beginning of the "Opinion and Interest" section.

Mobility - Four items address the individual's propensity to change jobs. Three of these pertain to work history and are included in the "Background Information" section (items 7, 31, and 33). The fourth item (SURV20) questions the individual's willingness to leave the Coast Guard in order to continue flight activity.

Evaluation - Two items (SURV06 and SURV26) address the manner in which the performance of Coast Guard aviators is evaluated.

Professional Goals and Area of Achievement - Nine items (SURV05, 07, 10, 12, 17, 21, 24, 27, 29) deal with this subject. The desirability of various jobs and tasks (professional goals) and individual aspirations for cosmopolitan and local type achievements are addressed.

Tour Length - Opinions concerning the proper length of a tour of duty at an aviation unit are sought in two items (SURV04 and SURV16).

Identity and Loyalty - The remainder of the items address how the individual identifies with aviation as a general profession and with the Coast Guard as an organization.

The last two items in the questionnaire ask the individual's willingness to participate in a limited duty

aviation career path with limitations on promotion. It is hypothesized that participation in such a program constitutes cosmopolitan behavior and as such will be highly correlated with cosmopolitan-like responses on other items.

b. Scoring

Item responses are recorded as single numerical digits. With the exception of the three "warm up" questions, item responses from the "Opinion and Interest" section are scored with values from one to five corresponding to points on the Likert scale. These items are scored so that high numerical values (4's and 5's) are assigned responses that would normally be associated with local career orientations while low values (1's and 2's) are assigned to cosmopolitan-like ones.

2. The Strong-Campbell Interest Inventory

The Strong-Campbell Interest Inventory is a published vocational interest test of unusually high validity. Its basis is empirical sampling of numerous occupational groups from many fields. By comparing the responses of an individual with the known responses of individuals in various occupations the test can be used to counsel a subject concerning a vocational choice. The test results provide standardized scores for individuals for Holland's six occupational themes, twenty-three basic occupational interest areas, and 183 specific vocations (see Table 1). The instrument has been shown to have high reliability (>70% after two weeks and >60% after two years) as well as having significant concurrent validity (Campbell, 1977).

Table 1

SCII Occupational Themes and Interest Areas

Holland's Six Themes

Realistic
Investigative
Artistic
Social
Enterprising
Conventional

Music/Dramatics

Art
Writing
Teaching
Social Science
Athletics
Domestic Arts
Religious Activities
Public Speaking
Law/Politics
Merchandising
Sales
Business Management
Office Practices
Science
Mathematics
Medical Science

Basic Interest Scales

Agriculture
Nature
Adventure
Military Activities
Mechanical Activities
Medical Service

IV. DATA ANALYSIS AND RESULTS

A. GENERAL

1. Data Processing

Data was processed and analyzed using the Naval Post-graduate School IBM 3330 computer system and the Statistical Package for the Social Sciences (Nie et. al., 1975). Because of the high response rate and as the entire population was surveyed by the questionnaire, the need for statistical inference from the sample was eliminated. The data sample set was large enough to be regarded as constituting responses from the entire population.

Data was compiled from returned surveys by the voice to disk method using equipment at the NPS man-machine laboratory and the IBM 3330 computer system. Sample checks indicated an input error rate of less than one percent for the voice to disk system. The input format and method also allowed a cursory check of the data after transcription from the questionnaire and before final recording on the disk. As the range of possible responses for most items was limited to five values or less, a final check on input accuracy was made. This was done by insuring that all recorded responses were within the permissible region for their respective items. Although this was admittedly only a partial check, it added support to the high accuracy found by sampling as only nine characters of 46,632 were found to be recorded improperly.

2. Defining "Willingness to Participate"

Defining "willingness to participate in an LDO program" is a crucial part of the analysis. For the purpose of evaluating the first two hypotheses, this will be defined as a response in the block closest to "would" on item SURV31 (reproduced below). This will give the most conservative estimate of the number of potential LDOs and the program's potential effect at the lieutenant commander to commander promotion point.

In considering the other hypotheses, willingness to participate in an LDO program will be considered to be reflected by the sum of the scored responses to items SURV30 and SURV31. This sum will constitute a new, nine value (2-10) variable designated COMB. This new variable, through its expanded scale, will be able to reflect more degrees of willingness to participate while at the same time permitting better correlational and regression analysis where required.

30) I _____ participate in a program whereby pilots were guaranteed to stay in flying billets their entire career.

Would Would not
(1) (2) (3) (4) (5)

31. I _____ participate in the above mentioned program even if it meant not being promoted beyond Lieutenant Commander.

Would Would not
(1) (2) (3) (4) (5)

Note: Scoring numbers in parentheses did not appear on the surveys completed by respondents.

Figure 1: Items SURV30 and SURV31

B. EVALUATION OF HYPOTHESES

1. Hypothesis 1

More than fifteen percent of the population would be willing to participate in a limited duty officer program in which participants would not advance in rank beyond lieutenant commander.

For the purposes of this hypothesis, willingness to participate in an LDO program is considered to be indicated by responses in only the left-most block of item SURV31. Even making this very conservative assumption 18.8 percent of the respondents (130 individuals) are found to be potential program participants (see Figures 2 and 3).

SURV31 I _____ participate in the above mentioned program even if it meant not being promoted to lieutenant commander.

Category Label	Code	Absolute Freq.	Relative Freq. (Pct.)	Adjusted Freq. (Pct.)	Cum Freq. (Pct.)
Would	1.	130	18.7	18.8	18.8
	2.	75	10.8	10.8	29.6
	3.	80	11.5	11.5	41.1
	4.	82	11.8	11.8	53.0
Would not	5.	326	46.8	47.0	100.0
	9.	3	0.4	Missing	100.0
Total		696	100.0	100.0	

Figure 2: Frequency table for responses to item SURV31

Another, and perhaps more valid, approach is to examine only the replies of lieutenants and lieutenant commanders as it would be this group that would most likely be called upon to decide whether or not to participate in an LDO program. In addition to being the "target group" the responses of lieutenants and lieutenant commanders are probably more credible than those of other officers. This is because officers junior to this group are less likely to be fully socialized into Coast

Guard aviation while the responses of more senior officers are necessarily retrospective and probably subject to inaccuracies.

Breaking down the replies to item SURV31 by rank it is found that lieutenants and lieutenant commanders responding on the far left of the Likert scale constitute eleven percent of the aviator population overall. More significantly, though, of the 380 lieutenants and lieutenant commanders surveyed, seventy-six, or twenty percent, strongly indicate they would participate in an LDO program (see Figure 4). This seems to indicate more than enough interest required from the target group to permit establishment of such a program.

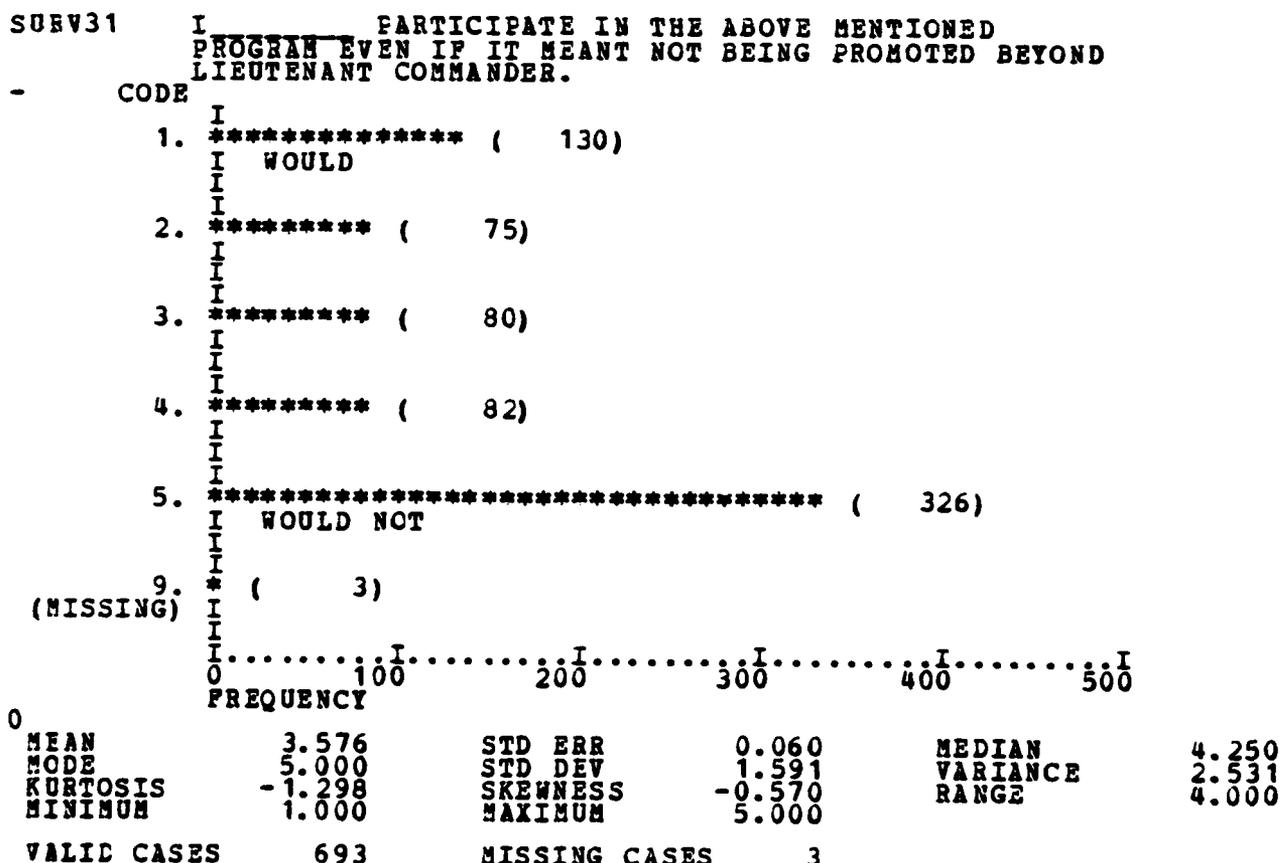


Figure 3: Frequency Distribution and Related Statistics for Responses to Item SURV31

RANK	SURV31										ROW TOTAL	
	COUNT ROW COL TOT	PCT PCT PCT	I WOULD					WOULD NOT				ROW TOTAL
			I					I				
			1.I	2.I	3.I	4.I	5.I	1.I	2.I	3.I		
EWS 1.	3		3	2	1	0	0	0	0	0	6	
	50.0		33.3	16.7	0.0	0.0	0.0	0.0	0.0	0.9		
	2.3		2.7	1.3	0.0	0.0	0.0	0.0	0.0			
	0.4		0.3	0.1	0.0	0.0	0.0	0.0	0.0			
LTJG 2.	37		17	9	15	33				111		
	33.3		15.3	8.1	13.5	29.7				16.0		
	28.5		22.7	11.3	18.3	10.1						
	5.3		2.5	1.3	2.2	4.8						
LTO3 3.	50		25	34	27	61				197		
	25.4		12.7	17.3	13.7	31.0				28.4		
	38.5		33.3	42.5	32.9	18.7						
	7.2		3.6	4.9	3.9	8.8						
LCDR 4.	26		18	23	24	92				183		
	14.2		9.8	12.6	13.1	50.3				26.4		
	20.0		24.0	28.8	29.3	28.2						
	3.8		2.6	3.3	3.5	13.3						
CDR 5.	11		9	11	15	90				136		
	8.1		6.6	8.1	11.0	66.2				19.6		
	8.5		12.0	13.8	18.3	27.6						
	1.6		1.3	1.6	2.2	13.0						
CAPT 6.	3		4	2	1	50				60		
	5.0		6.7	3.3	1.7	83.3				8.7		
	2.3		5.3	2.5	1.2	15.3						
	0.4		0.6	0.3	0.1	7.2						
COLUMN TOTAL	130		75	80	82	326				693		
TOTAL MISSING OBSERVATIONS =	18.8		10.8	11.5	11.8	47.0				100.0		

Figure 4: Breakdown of Responses to Item SURV31 by Rank

a. A Related Question

The officer personnel structure of Coast Guard Aviation is such that there exists a relatively large number of junior officer (duty standing and flying) billets and a relatively small number of senior officer (command and control) billets. Because of this, competition for promotion to senior officer rank is much keener among aviators than is experienced by other specialty groups. An LDO aviator program could help to normalize this competition by removing a portion of the

population from consideration for promotion to senior officer rank. It is important to ask, therefore, what effect, if any, an LDO program would have on officer promotion.

To determine the effect of an LDO program on the promotion system, additional analysis is necessary. This is because many of the potential LDOs are fairly junior officers with relatively large amounts of credited service time either from enlisted experience or service in another branch of the military. Many of these officers will certainly retire before competing for promotion to commander under the present system. This group can not, therefore, be considered when examining an LDO program's effect on competition for promotion to commander.

For the purposes of this analysis the following, mostly conservative, assumptions are made:

1. Only those persons responding to item SURV31 (reproduced below) in the left-most block of the Likert scale would participate in an LDO program.
31. I _____ participate in the above mentioned program even if it meant not being promoted beyond Lieutenant Commander.
- Would Would not

Figure 5: Item SURV31

2. The responses of commanders and captains to item SURV31 are unreliable and should not be considered (this eliminates 196 of the 696 respondents).
3. All officers with twenty years of service who have not been selected for promotion to commander will retire.
4. Consideration and selection for promotion to commander takes place six months before actual promotion.

5. All officers have at least one year of service in grade (this is necessary as time in grade survey responses are all scored at a minimum of one year).
6. The time between promotions listed in Table 2 are relatively invariant.
7. No potential LDOs will fail of selection under the present system before being considered for promotion to commander.

Table 2
Times Between Promotions

ENS to CDR	14 yrs. 8 mos.
LTJG to CDR	13 yrs. 2 mos.
LT to CDR	10 yrs. 5 mos.
LCDR to CDR	5 yrs. 6 mos.

(Source: U.S. Coast Guard Commandant's
Bulletin 29-81)

Using these assumptions, the number of officers who would be program participants and who would have otherwise been eligible for consideration for promotion to commander can be sought. This is done by computing a new variable, COMPETE, for each program participant as illustrated in Table 3.

Table 3
Computation of Variable COMPETE

$$\text{COMPETE} = 20 - \text{YRSERV} - (\text{TCDR} - \text{YRSINGRD})$$

Where: 20 = Number of years service required for retirement.

YRSERV = Individual's present years of service.

TCDR = Number of years (rounded to the nearest whole year) between promotion to the individual's present rank and consideration for promotion to commander. Figures taken from Table 1 less six months to allow for selection/promotion lag.

YRSINGRD = Individual's number of years service in present grade (rank).

Individuals with negative values of COMPETE will not be considered for promotion to commander before retirement under the present system while those with positive values will. A value of zero can be considered to place an individual in the "will not be considered" group as requests for retirement must be submitted a minimum of six months in advance.

Sixty-five percent of the potential LDOs, or seventy-six individuals, will be eligible for consideration for promotion to commander under the present system prior to having twenty years of service (see Figure 6). This means that of the 500 lieutenant commander and more junior officers in the population, 15.2 percent would be removed from competition for commander by an LDO program. This is an extremely conservative figure as many officers not considered as potential LDOs will certainly retire before being considered for commander. The seventy-six individuals removed from consideration, then, would be a larger part of a smaller group.

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	-9.	1	0.9	0.9	0.9
	-8.	2	1.7	1.7	2.6
	-7.	1	0.9	0.9	3.4
	-5.	3	2.6	2.6	6.0
COMPETE	-4.	3	2.6	2.6	8.6
	-3.	6	5.2	5.2	13.8
	-2.	3	2.6	2.6	16.4
	-1.	11	9.5	9.5	25.9
	0.	10	8.6	8.6	34.5
	1.	8	6.9	6.9	41.4
	2.	13	11.2	11.2	52.6
VALID CASES	3.	4	3.4	3.4	56.0
	4.	7	6.0	6.0	62.0
	5.	16	13.8	13.8	75.9
MISSING CASES	6.	24	20.7	20.7	96.6
	7.	4	3.4	3.4	100.0
	TOTAL	116	100.0	100.0	
MEAN	2.000	STD ERR	0.353	MEDIAN	2.269
MODE	6.000	STD DEV	3.802	VARIANCE	14.452
KURTOSIS	-0.100	SKEWNESS	-0.731	RANGE	16.000
MINIMUM	-9.000	MAXIMUM	7.000		

Figure 6: Values of COMPETE for Potential LDOs

2. Hypothesis 2

Willingness to participate in an LDO program is a function of an individual's career orientation and varies directly with cosmopolitan traits.

A stepwise regression analysis can be used to examine which questionnaire items are related to an individual's willingness to participate in an LDO program. Regression is an appropriate method of analysis as both career orientation and willingness to be an LDO are best expressed in terms of a continuum with many "shades of grey" between the poles of cosmopolitan/LDO and local/unrestricted line officer.

The dependent variable in the analysis will be the variable COMB which is simply the summed scored responses to items SURV30 and SURV31 (reproduced below).

30. I _____ participate in a program whereby pilots were guaranteed to stay in flying billets their entire career.
Would Would not

31. I _____ participate in the above mentioned program even if it meant not being promoted beyond Lieutenant Commander.
Would Would not

Figure 7: Items SURV30 and SURV31

All of the items in the questionnaire can be used as independent variables in the analysis with the exception of items SURV30, SURV31, and SURV15. Items SURV30 and SURV31 can not, of course, be included as they are used to construct the dependent variable. Item SURV15 can not be used because of its great similarity to item SURV31.

Only those independent variables that contribute to the regression at the .01 level of significance ($F=6.63$) or better will be included in the analysis.

Fifty-nine percent of the variance in the data is explained by the regression and a multiple R of .77 is evidenced (see Figure 9). Of the eight variables contributing to the regression the first (most important) six are items from the "Opinion and Interest" section of the questionnaire. These are reproduced below and have been annotated with their scoring scheme.

As was expected, how an individual identifies himself on a continuum from officer to pilot has the single greatest ability to predict his willingness to participate in an LDO program. Since identification was the most dominant theme found in other studies (see for example Gouldner, 1957; Merton, 1957; or Bentz, 1950) this fits well with what has been found by others. It also provides convincing evidence that participation in a specialist career path is cosmopolitan behavior.

The next five variables support the contention that participation in a specialist career path is cosmopolitan behavior as they deal with two constructs important in distinguishing cosmopolitan and locals - professional goals and area of achievement. Items SURV05, SURV22 and SURV14 all deal with the desirability of job attributes (professional goals) that might be encountered by a Coast Guard pilot. Items SURV21 and SURV29 address the relative importance of local and cosmopolitan

type goals. Although two demographic variables contribute to the regression also, it is important to note that the six "Opinion and Interest" section variables by themselves predict fifty-seven percent of the variance and achieve a multiple R of .756.

28. To what extent do you think of your career as the career of a Coast Guard officer or that of a Coast Guard pilot?

Mostly as a Pilot Mostly as an Officer

5. I dislike the idea of being assigned to a non-flying staff job during my career.

Strongly Agree Strongly Disagree

_____ Please indicate how important each of the following things are to you in your career. _____

21. Becoming a unit X.O. or C.O.

Very Important Very Unimportant

22. Flying Coast Guard aircraft.

Very Important Very Unimportant

29. If the Coast Guard wide designations were established, I would be _____ in becoming a unit instructor pilot, flight examiner, or instrument examiner.

Very Interested Very Uninterested

14. I dislike paperwork _____ than most other Coast Guard pilots.

Much More Much Less

Figure 8: The six Opinion and Interest items in the regression

SPSS BATCH SYSTEM
 FILE TMSIS (CREATION DATE - 09/30/81)
 **
 DEPENDENT VARIABLE.. COMB

11/12/81 PAGE 25

VARIABLE LIST 1
 REGRESSION LIST 1

MULTIPLE REGRESSION

SUMMARY TABLE

VARIABLE	MULTIPLE R	R SQUARE	MSO CHANGE	SIMPLE R	B	F	BETA
SUBV28	0.5986	0.3582	0.3474	0.5986	0.3474	38.807	0.7627
SUBV05	0.5986	0.3582	0.3474	0.5986	0.3474	38.807	0.7627
SUBV21	0.5986	0.3582	0.3474	0.5986	0.3474	38.807	0.7627
SUBV22	0.5986	0.3582	0.3474	0.5986	0.3474	38.807	0.7627
SUBV29	0.5986	0.3582	0.3474	0.5986	0.3474	38.807	0.7627
SUBV16	0.5986	0.3582	0.3474	0.5986	0.3474	38.807	0.7627
DATA	0.5986	0.3582	0.3474	0.5986	0.3474	38.807	0.7627
CCA	0.5986	0.3582	0.3474	0.5986	0.3474	38.807	0.7627
(CONSTANT)	0.5986	0.3582	0.3474	0.5986	0.3474	38.807	0.7627

MULTIPLE R	R SQUARE	ADJUSTED R SQUARE	STANDARD ERROR	ANALYSIS OF VARIANCE	SUM OF SQUARES	MEAN SQUARE	F
0.7707	0.5931	0.5931	1.72216	REGRESSION	779.3582	347.8695	117.29263
				RESIDUAL	1989.99371	2.96503	
				TOTAL	2769.35191		

Figure 9: Summary of Regression Analysis Results

3. Hypothesis 3

Individuals who have not been selected on schedule for the next higher rank will be more willing to participate in an LDO program than others.

"Willingness to participate" can again be defined as an individual's score on the nine value variable COMB. Individuals who have failed of selection can be defined as those who have times in grade of a year or more beyond what would normally be expected for their particular rank (see Table 2). Although exclusion of those passed over for promotion within a year may eliminate some individuals from the analysis who had only recently failed of selection at the time of the survey, it also helps prevent the initial emotional reaction to it from becoming an extraneous variable in the study.

Fourteen respondents were not selected on time for promotion to the next higher rank. Five of these are lieutenants and nine are lieutenant commanders. Z tests (t with $d.f. = \infty$) can be used to compare the COMB scores of the "failed of selection group" to those of the aviation population generally and to those of other lieutenants and lieutenant commanders (see Figure 10).

No significant difference in willingness to participate in an LDO program was found between the failed of selection group and either the population generally or the lieutenant/lieutenant commander group. The data does not support the hypothesis.

	GROUP 1 Passed over officers	GROUP 2 General population	GROUP 3 Lieutenants and Lieutenant Commanders
n	14	696	382
\bar{X}	5.071	5.916	5.709
σ^2	6.841	7.260	7.330

Test Statistic Formula:

$$\begin{aligned} \text{d.f.} &= \infty \\ z_{.005} &= 2.576 \\ z_{.01} &= 2.326 \end{aligned}$$

$$z = \frac{(\bar{X}_1 - \bar{X}_2)}{\sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}}$$

A. Ho: $\mu_1 - \mu_2 = 0$ or - There is no significant difference at the .01 level between the replies of the passed over group and the general aviator population.

$z = 1.196$ Fail to reject the null hypothesis.

B. Ho: $\mu_1 - \mu_2 = 0$ or - There is no significant difference at the .01 level between the replies of the passed over group and other lieutenants and lieutenant commanders.

$z = .8953$ Fail to reject the null hypothesis.

Figure 10: Computation of Z Statistics for Hypothesis 3

4. Hypothesis 4

Willingness to participate in an LDO program is a function of rank.

To examine this hypothesis it is only necessary to re-view the analysis in Figure 9. The rank variable makes a significant, independent contribution to the regression equation for willingness to become an LDO. Its B value is also positive, demonstrating that the higher the rank the lower the tendency to want to be an LDO.

In order to eliminate from the analysis what might be the undue influence of senior officer replies, a Pearson

correlation between RANK and COMB (willingness to participate) was computed using only the junior four grades (ensign to lieutenant commander). Though the correlation between the two falls from .38104 to .2418, the correlation remains significant at better than the .01 level.

It can safely be concluded that the data support the hypothesis.

5. Hypothesis 5

Willingness to participate in an LDO program is a function of commissioning source.

The regression analysis in Figure 9 also supports this hypothesis. Coast Guard Academy commissioning source, is a contributor to the equation with a positive B value. This confirms the expectation that academy graduates would be less likely to want to participate in an LDO program and that commissioning source is an important factor. It is important to note that although it is the last variable included in the analysis and its contribution to R squared fairly small, commissioning source does make a significant, independent contribution to the equation at better than the .01 level.

6. Hypothesis 6

Individuals willing to participate in an LDO program prefer longer tours of duty than do other officers.

The correlation coefficient between the willingness to participate variable, (COMB), and desired tour length as evidenced in item SURV16 is highly significant (.001), though the coefficient is relatively small (.2069). The hypothesis is supported, though not particularly robustly.

One reason this relationship is not as pronounced as it might be, may be the overwhelming preference among the entire population for longer tours of duty. Eighty-five percent of all the respondents indicated preference for tours of duty longer than the three year standard now in effect.

7. Hypothesis 7

Achieving status as a pilot through advanced qualifications is significantly more important to potential LDOs than to others.

To affirm this hypothesis it is only necessary to refer once again to the regression analysis in Figure 9. One of the most prestigious advanced qualifications is that of instructor pilot, and interest in becoming a unit instructor pilot (SURV29) is a significant predictor of willingness to become an LDO.

8. Hypothesis 8

Willingness to participate in an LDO program (and therefore career orientation) can be predicted using the Strong-Campbell Interest Inventory.

Defining willingness to participate as an individual's value of COMB, regression analyses can be done with COMB as the dependent variable and SCII scores as the independent variables. As SPSS regression analysis is limited to the consideration of 100 independent variables at a time, two regressions are initially required. One, including the scores on the six Holland occupational themes and twenty-three basic interest areas as independent variables, and the other using the ninety-one scores for males in specific vocations. Using the variables found in these first two analyses as independent variables for a third

regression, the overall predictive ability of the SCII can be found.

The results of this last regression show SCII scores explaining only twenty-five percent of the variance in JOMB while achieving a multiple R of .5 (see Figure 12). These results are obtained with a significance level of .05, marginally supporting the hypothesis.

An explanation for these modest results may lie in the fact that the SCII is designed to differentiate between professions rather than professional subgroups. It is quite possible that the career interests of locals and cosmopolitans in the same profession are not divergent enough to be detected with the SCII. This could be particularly true in this case as the SCII manual lists the same vocational interest constructs as applying to both pilot and Navy officer careers.

SPSS BATCH SYSTEM
 FILE SCII (CREATION DATE = 10/05/81)
 11/04/81 PAGE 8
 DEPENDENT VARIABLE.. COMB
 MULTIPLE REGRESSION
 VARIABLE LIST 1
 REGRESSION LIST 2

SUMMARY TABLE

VARIABLE	F	MULTIPLE R	R SQUARE	MS CHANGE	DF	SUM OF SQUARES	MEAN SQUARE	BETA
SCIB099	1.699	0.25179	0.06312	0.06312	97	1.771375	5.47255	-0.12048
SCIB122	9.743	0.32834	0.10681	0.04369	97	331.00376	3.41229	-0.28200
SCIB123	2.861	0.35082	0.12502	0.04190	97	331.00376	3.41229	-0.23779
(CONSTANT)								

Figure 12: Regression Analysis Results Using COMB and SCII Scores

V. CONCLUSION

A. SUMMARY OF RESULTS

The cosmopolitan and local career orientations that are so evident in other professions also appear to exist in the Coast Guard aviator population (this probably is also true for military pilots generally). These career orientations, as might be expected, are directly related to an individual's willingness to participate in a limited duty officer career path.

Analysis of survey data reveals that a minimum of twenty percent of the aviator lieutenants and lieutenant commanders would participate in an LDO program. This would meet the organization's goal of reducing the number of pilots competing for promotion to commander. More than fifteen percent of the pilots that will be considered for promotion to commander under the present system would participate in an LDO program and thereby remove themselves from the competition.

Willingness to participate in an LDO program is directly related to career orientation, rank, commissioning source, and interest in becoming a unit instructor pilot. There is also a relationship between willingness to become an LDO and perceived optimal tour length. This last relationship, though significant, is slight, as a great majority of all survey respondents preferred longer tours of duty.

Officers that had not been selected for the next higher rank on schedule are surprisingly no more willing to participate in an LDO program than are others.

Finally, the SCII appears to be unable to predict career orientation or willingness to become an LDO. This may be a function of the instrument or it could be that cosmopolitans and locals do not differ in vocational interests significantly.

B. AN LDO PROGRAM

There is a great amount of interest among the Coast Guard aviator population in the general question of career orientation and the specific proposal of an LDO aviator program. This interest is evidenced by the exceptionally high response rate. That there are sufficient numbers of pilots willing to participate in such a program is probably beyond question. Whether any given program would succeed in practice, however, is an entirely different issue. Should an LDO aviator program be established, its success or failure will hinge on its ability to satisfy the needs of both the organization and the individual.

From the organization's point of view the main advantage of an LDO aviator program is probably its effect in normalizing the officer promotion system. Although having a "hard core" of professional aviators might also be attractive, especially in regard to accident prevention and mission effectiveness, its benefits are difficult to predict and quantify and would probably not be a significant consideration. As is evident in the examination of hypothesis 1, an LDO program could easily

meet the organization's goal of reducing competition among aviators for promotion to commander. Such a program would only succeed in doing this, however, if it had sufficient participation. This study demonstrates that sufficient numbers of potential participants exist in the population. The number of aviators that might actually participate in any given LDO program, though, would be a function of that program's structure, opportunities, and ability to satisfy the career aspirations of the individual participants.

C. PROGRAM STRUCTURE

This study, associated literature, narrative replies appended to returned surveys, and personal contact with other aviators during the course of this project have shown several elements that are probably essential to the success of an LDO aviator program, should one be established.

1. Expectations

Prior to entering the program, participants should be fully aware of the demands that would be placed on them as LDOs. Although LDOs would probably be assigned less demanding and more flight-oriented collateral duties, using this as a selling point of the program could raise false hopes and cause later disillusionment. The administrative load at many air units requires the attention of all pilots assigned under the present system. Exempting part of the staff from even part of these duties could cause unreasonable demands to be placed on others,

as well as to generate a certain degree of animosity. As a minimum, LDOs would have to expect to do their fair share of routine audits, investigations, reports, and inventories. While it could be a good policy to assign LDOs primarily to departments in which their aviation expertise could be utilized, i.e., operations, engineering, training, safety, it would most certainly be a mistake to create the expectation that LDOs would only "fly and go home."

A selection for the LDO aviator career path should not be made to evade responsibilities but rather to bring the primary scope of those responsibilities more into line with career interests. Officers selecting the LDO career path should realize they would still be required to assist the command in some non-aviation areas.

2. Requirements and Evaluation

Performance requirements for LDOs should be as rigorous as those for other officers, though oriented more about aviation duties. LDOs should be expected to be especially proficient in maneuvering their aircraft and should be more familiar with aircraft systems, operations, and capabilities than might be expected of the average, high quality pilot. Minimum acceptable scores on the annual standardization and proficiency team exam should be established for LDOs. To reinforce this effort, the degree to which an LDO contributes to the overall aviation professionalism and proficiency of the command through the performance of his flight and collateral duties should be addressed in performance evaluations.

To be less demanding of LDOs than of other officers would be both to miss a great opportunity and to doom the program to failure. Without high performance requirements the opportunity to establish a "hard core" of highly skilled and professional aviators would be lost. People tend to perform as they are expected to perform. If only routine aviation competence was expected of LDOs only routine competence would be achieved. The establishment of an LDO program would identify a group of pilots as different from the general population. It would take very little reinforcement either way to make this difference a mark of excellence or a social stigma. Stringent performance requirements would insure that the LDOs would become the "professionals' professionals."

Not assuring such high standards for LDOs could also easily lead to failure of the program. If LDOs were only run-of-the-mill pilots their only real distinction in the service would be that they did not get promoted as quickly or as far as everyone else. This distinction could easily lead to a "loser" syndrome wherein actually less was expected of LDOs than of others. An environment such as this would most certainly be counter-productive with all the lack of commitment, safety and morale problems the term "loser" connotes. Such a program could not be allowed to continue long regardless of its effect on officer promotion flow or anything else. Few pilots would wish to participate in such a program and few commanding officers would be willing to tolerate its attendant problems.

3. Achievement

Finally, achievement opportunities within the LDO program structure should be provided. This study demonstrates that potential LDOs do not wish to simply remove themselves from the system and stagnate. Like other cosmopolitan professionals, they seek achievement within their profession rather than within the organization. To make the program viable, opportunities for this achievement should be provided.

The failure to provide achievement and success opportunities for LDOs would make the program a dead-end option and much less attractive to skilled pilots. This failure would be particularly tragic as providing these opportunities would be fairly easy to accomplish. Sources of achievement for LDOs could include participation in Aviation Safety Officer and Aviation Maintenance Officer training. Some, if not most, of the prestigious instructor pilot billets at the Coast Guard Aviation Training Center could be designated for LDOs. Date of original qualification as an aircraft commander could be used to determine the pilot in command for flight missions. This would recognize an LDO's expertise and permit him to command a mission even when flying with a slightly more senior officer. The program might even be structured to include two or three senior officer LDOs who would be stationed in key aviation positions. Providing opportunities such as these would contribute to the satisfaction and motivation of the pilots and help prevent any feeling that the program was a dead-end.

APPENDIX A
THE QUESTIONNAIRE

Notes:

1. Responses in the Background Information section were scored as zeros when items were unmarked.

2. Unmarked items in the Opinion and Interest Survey section were recorded as nines with the exception of the first item. When the first item was left unmarked an eight was recorded.

3. Handwritten numbers indicate the scoring scheme throughout the instrument. With the exception of the first item, all items in the Opinion and Interest Survey section were scored with low values representing cosmopolitan-like responses and high values representing local responses.

4. The handwritten scoring number and notes were not on surveys mailed out for data collection.

CG Pilot Questionnaire
Spring 81

BACKGROUND INFORMATION

Please fill in the blanks or check the appropriate response

General

Educational Background

1. Age _____ (2 DIGITS)
2. Rank - Ens. - 1
 LTJG. - 2
 LT. - 3
 LCDR. - 4
 CDR. - 5
 CAPT. - 6
3. Years in Grade _____ (1 DIGIT)
4. Total years as Aviator (2 DIGITS)
5. Total years in Service (2 DIGITS)
6. Obligated Service Complete?
 Yes - 0
 No - 1
7. Source of Commission:
 OCS - 1
 OCS (Prior CG Enlisted) - 2
 CGA - 3
 AVCAD - 4
 DCA - Army - 5
 DCA - Navy - 6
 DCA - AF - 7
 DCA - Marines - 8
 Other _____ - 9

8. Yrs. college or equiv. _____ (1 DIGIT)
9. Degree: None - 1
 AA - 2
 AS - 3
 BS - 4
 BA-Business - 5
 BA-other - 6
10. Post-graduate study
 Some - 1
 Degree - 2
11. Type of degree _____
 MBA = 1
 MS = 2
 MA = 3
 LAW = 4
 OTHER = 7
 PHD = 9
12. Went on your own - 1
 Sent by CG - 2
13. Completed Aviation Safety Officer Course - 1
14. Completed Student Engineer Program - 1

Background Information (cont.)

Career Experiences

15. Majority of Flight Time in:

- H-52 - 1
- H-3 - 2
- C-131/HU-16 - 3
- C-130 - 4

Tours since Flight School:

- 16. Number (1 DIGIT)
- 17. Number DIFOPS Tours (2 DIGIT)

Number of other tours at:

- 18. Headquarters (1 DIGIT)
- 19. Dist/Area Staff (1 DIGIT)
- 20. Grad. School-Staff/War Coll. (1 DIGIT)
- 21. Others (Please specify) (1 DIGIT)

Assignments since Flight School:

- | | |
|--|--|
| 22. Air Sta. | 23. Other Unit |
| 1 C.O. - <input type="checkbox"/> | C.O. - <input type="checkbox"/> 1 |
| 2 X.O. - <input type="checkbox"/> | X.O. - <input type="checkbox"/> 2 |
| 3 OPS - <input type="checkbox"/> | OPS - <input type="checkbox"/> 3 |
| 4 E.O. - <input type="checkbox"/> | E.O. - <input type="checkbox"/> 4 |
| 5 Dept. Hd. - <input type="checkbox"/> | Dept. Hd. - <input type="checkbox"/> 5 |
24. Headquarters Section Head or Above - 1
25. Mobile Instructor - 1
26. A.R.S.C. Pilot - 1

Miscellaneous

- 27. Married - 0
- Single - 1

Civil Pilot Ratings held:

- 28. Private 1
- Commercial 2
- ATP 3
- ATP + Type Rating(s) - 4
- 29. Instructor/Ground 1
- Instructor/Flight 2

30. Do you keep current in any of your civil ratings through off duty flying?

- Yes - 0
- No - 1

31. Besides the Coast Guard, how many full time jobs have you held for nine months or more?

- 0 - 0
- 1 - 1
- 2 - 2
- 3 or more - 3

32. Have you had enlisted time in any service?

- Yes - 0 How much? X ELIMINATED
- No - 1

33. Have you had any breaks in military service?

- Yes - 0
- No - 1

OPINION AND INTEREST SURVEY

1) When you first joined, what attracted you to the Coast Guard as opposed to another service or a civilian job?

Travel Opportunities	Relative in Service	SAR Mission	Didn't want to be Drafted	Other _____
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

MORE THAN ONE RESPONSE = 9 EDUCATION = 6

2) Did you enter the Coast Guard (or graduate from the Academy or O.C.S.) intending or hoping to become a pilot?

Yes 1 No 2

3) All other things being equal, I intend to stay in the Coast Guard at least until 20 year retirement.

Will surely <u>RESIGN</u> before	Probably <u>RESIGN</u> before	Undecided	Probably will <u>STAY IN</u>	Will surely <u>STAY IN</u>
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

4) With the exception of out of CONUS tours, I feel that the average tour length should at present be:

Longer	About the Same	Shorter
<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3

_____ Please indicate your opinion on the following issues and statements by checking a box on the scale between the two opposite replies. _____

5) I dislike the idea of being assigned to a non-flying staff job during my career.

Strongly Agree 1 2 3 4 5 Strongly Disagree

6) Too much importance is placed on collateral duties in a pilot's fitness report.

Strongly Agree 1 2 3 4 5 Strongly Disagree

7) I would enjoy being the Station Admin. Officer.

Strongly Agree 5 4 3 2 1 Strongly Disagree

8) I would choose a flying assignment in a less desirable location over a non-flying assignment in a more desirable location.

Strongly Agree 1 2 3 4 5 Strongly Disagree

9) If Coast Guard Aviation was disbanded, I would be _____ in some other Coast Guard branch, office or field unit.

Very Unhappy 1 2 3 4 5 Just as Happy

10) I would enjoy being the Station X.O.

Strongly Agree 5 4 3 2 1 Strongly Disagree

11) The kind of pilot who just wants to fly usually doesn't put as much effort into his collateral duties as others do.

Strongly Agree 5 4 3 2 1 Strongly Disagree

12) My average monthly flight time is:

Lower than I would like 1 2 3 4 5 Higher than I would like

13) Flying is more important to me than getting my staff work done.

Strongly Agree 1 2 3 4 5 Strongly Disagree

14) I dislike paperwork _____ than most other Coast Guard pilots.

Much More 1 2 3 4 5 Much Less

15) I would be willing to forego promotion to CDR in order to continue flying for my entire 20 year career.

Strongly Agree 1 2 3 4 5 Strongly Disagree

16) I feel that, generally, the best tour length for an aviation duty stander at an Air Station is:

6 yrs. or more 1 5 yrs. 2 4 yrs. 3 3 yrs. 4 2 yrs. or less 5

17) It would be worth the effort for the Coast Guard to develop standardized advanced pilot qualifications such as instructor pilot and flight examiner and have someone qualified at each unit.
 Strongly Agree 1 2 3 4 5 Strongly Disagree

18) A Coast Guard pilot's important work is flying the aircraft - administrative duties should be left mostly to others.
 Strongly Agree 1 2 3 4 5 Strongly Disagree

19) The primary reason I am in the Coast Guard is because I enjoy flying Coast Guard aircraft.
 Strongly Agree 1 2 3 4 5 Strongly Disagree

20) If I could do it without losing rank and benefits, I would transfer to another service to keep flying rather than being promoted out of flying by the Coast Guard.
 Strongly Agree 1 2 3 4 5 Strongly Disagree

_____ Please indicate how important each of the following things are to you in your career. _____

21) Becoming a unit X.O. or C.O.
 Very Important 5 4 3 2 1 Very Unimportant

22) Flying Coast Guard aircraft.
 Very Important 1 2 3 4 5 Very Unimportant

23) Participating in decisions concerning the direction of Coast Guard aviation as a whole.
 Very Important 1 2 3 4 5 Very Unimportant

24) Becoming an unusually good pilot.
 Very Important 1 2 3 4 5 Very Unimportant

25) Participating in decisions effecting Coast Guard wide policy.
 Very Important 5 4 3 2 1 Very Unimportant

26) Being evaluated only on your abilities as a pilot.

Very Important 1 2 3 4 5 Very Unimportant

27) Serving in a highly responsible position on a district, area, or headquarters staff.

Very Important 5 4 3 2 1 Very Unimportant

28) To what extent do you think of your career as the career of a Coast Guard officer or that of a Coast Guard pilot?

Mostly as a Pilot 1 2 3 4 5 Mostly as an officer

29) If the Coast Guard wide designations were established, I would be _____ in becoming a unit instructor pilot, flight examiner, or instrument examiner.

Very Interested 1 2 3 4 5 Very Uninterested

30) I _____ participate in a program whereby pilots were guaranteed to stay in flying billets their entire career.

Would 1 2 3 4 5 Would not

31) I _____ participate in the above mentioned program even if it meant not being promoted beyond Lieutenant Commander.

Would 1 2 3 4 5 Would not

Thank you for taking the time to complete this questionnaire. Please return it to me at:

Lt. D.A. Goward
SMC 1105
Naval Postgraduate School
Monterey, CA. 93940

A pre-addressed return envelope has been enclosed.

Thanks again!

APPENDIX B

SPSS ANALYSIS PROGRAM AND OUTPUT FOR HYPOTHESES 1 THROUGH 7

Note: Data retained on punched cards by Commandant (G-P-1/2)
U.S. Coast Guard.

SPSS BATCH SYSTEM

SPSS FOR OS/360, VERSION 4, RELEASE 0.1, MAY 20, 1980

CURRENT DOCUMENTATION FOR THE SPSS BATCH SYSTEM
ORDER FROM MCGRAW-HILL: SPSS, 2ND ED. (ORIGINAL TEXT)
SPSS, 2ND ED. (FOR IBM TO SPSS) ORDER FROM SPSS INC.:
SPSS, 2ND ED. (FOR IBM TO SPSS) ORDER FROM SPSS INC.:
SPSS UPDATE (OS/360) FOR REL. 7 & 0)

SPSS STATISTICAL ALGORITHMS
SPSS CHECKLIST GUIDE RELEASE 9
KEYWORDS: THE SPSS INC. NEWSLETTER

DEFAULT SPACE ALLOCATION.. 30M TRANSFORMATIONS
WORKSPACE 26000 BYTES 1336 RECODE VALUES & LAG VARIABLES
TRANSPACE 30400 BYTES 6194 IF/COMPUTE OPERATIONS

1 GET FILE THESIS

FILE THESIS HAS 99 VARIABLES
THE SURFILES ARE..

NAME NO OF
CASES
THESIS 696

2 COMMENT HYPOTHESIS ONE - ANALYSIS ..
3 COMMENT ANALYSIS OF RESPONSES TO ITEM SURV31
4 COMMENT MI PARTICIPATE IN THE ABOVE MENTIONED
5 COMMENT PROGRAM" EVEN IF IT MEANT NOT BEING PROMOTED
6 COMMENT BEYOND LIEUTENANT COMMANDER
.....

CPU TIME REQUIRED.. 0.13 SECONDS

7 FREQUENCIES GENERAL = SURV31
8 STATISTICS ALL
9 OPTIONS 3
10 COMMENT ANALYSIS OF RESPONSES TO ITEM SURV31 BY MARK

GIVEN WORKSPACE ALLOWS FOR 19200 VALUES AND 5760 LABELS PER VARIABLE FOR 'FREQUENCIES'

SPSS MATCH SYSTEM
 11/12/81 FILE - TESIS - CREATED 09/30/81

SUBV31 ----- PARTIC IF LIMITED TO LCDR

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
WOULD	1.	130	18.7	18.0	18.8
	2.	75	10.6	10.0	29.6
	3.	80	11.5	11.5	41.1
	4.	82	11.6	11.0	53.0
WOULD NOT	5.	326	46.8	47.0	100.0
	9.	3	0.4	MISSING	100.0
	TOTAL	696	100.0	100.0	

SPSS BATCH SYSTEM
11/12/81 FILE - THESIS - CREATED 09/30/81
SUNV31 -----PARTIC IF LIMITED TO LCDR

CODE	FREQUENCY	STD DEV	STD ERR	MEAN	KURTOSIS	KURTOSIS	MINIMUM	MAXIMUM	RANGE	MEDIAN	VARIANCE
1. I WOULD	130	3.576	0.060	4.250	5.000	1.591	2.531	4.000			
2. I	75										
3. I	80										
4. I	82										
5. I WOULD NOT	326										
(MISSING) I	3										
	100										
	266										
	366										
	400										
	500										

MEAN	3.576	STD DEV	0.060	MEDIAN	4.250
MODE	5.000	STD DEV	1.591	VARIANCE	2.531
KURTOSIS	-1.298	SKEWNESS	-9.570	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	693	MISSING CASES	3		

SPSS BATCH SYSTEM

CPU TIME REQUIRED.. 0.34 SECONDS

11/12/81

PAGE 4

11 CROSSTABS
12 COMMENT
13 COMMENT
14 COMMENT

TABLES = NAME BY SURVEY
COMBINATIONS AND LIMITS FOR THE RELATED
QUESTION OF HOW MANY PROGRAMS WOULD IMPACT ON
ONE OFFICER PROMOTION SYSTEM

***** GIVEN WORKSPACE ALLOWS FOR 14933 CELLS. 14933 TABLES WITH 2 DIMENSIONS FOR CROSSTAB PROBLEM *****

SPSS BATCH SYSTEM
 FILE THESIS (CREATION DATE = 09/30/81)

COMPETE

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCT)	ADJUSTED FREQ (PCT)	CUM FREQ (PCT)
	-9.	1	0.9	0.9	0.9
	-8.	2	1.7	1.7	2.6
	-7.	1	0.9	0.9	3.4
	-5.	3	2.6	2.6	6.0
	-4.	3	2.6	2.6	8.6
	-3.	6	5.2	5.2	13.8
	-2.	3	2.6	2.6	16.4
	-1.	16	9.5	9.5	25.9
	0.	10	8.6	8.6	34.5
	1.	8	6.9	6.9	41.4
	2.	13	11.2	11.2	52.6
	3.	4	3.4	3.4	56.0
	4.	7	6.0	6.0	62.1
	5.	16	13.8	13.8	75.9
	6.	24	20.7	20.7	96.6
	7.	4	3.4	3.4	100.0
	TOTAL	116	100.0	100.0	

MEAN 2.000
 MODE 6.000
 HOMOGENEITY -0.100
 MINIMUM -9.000
 STD DEV 3.802
 STANDARD DEVIATION SQUARED 14.453
 MAXIMUM 7.000
 VALID CASES 116 MISSING CASES 0

SPSS DATUM SYSTEM
TRANSPACE REQUIRED... 700 BYTES
7 TRANSFORMATIONS
35 IF/COMPUTE OPERATIONS
CPU TIME REQUIRED.. 0.23 SECONDS

```
28 REGRESSION
29
30
31
32
33
34
35
36 COMMENT
37 COMMENT
38 COMMENT
39 COMMENT
40 COMMENT
41 COMMENT
42 COMMENT
43 COMMENT
44 COMMENT
45 COMMENT
46 COMMENT
47 COMMENT
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89 COMMENT
90 COMMENT
91 COMMENT
92 COMMENT
93 COMMENT
94 COMMENT
95 COMMENT
96 COMMENT
97 COMMENT
98 COMMENT
99 COMMENT
100 COMMENT
```

NO RESIDUALS OUTPUT WAS REQUESTED SO RESIDUALS WILL NOT BE CALCULATED. SEE MANUAL RE OPTIONS 11,12 AND STATISTICS 4,5,6.

***** REGRESSION PROBLEM REQUIRES 112032 BYTES WORKSPACE, NOT INCLUDING RESIDUALS *****

SPSS BATCH SYSTEM
 FILE THESIS (CREATION DATE = 09/30/81)
 DEPENDENT VARIABLE.. COMB
 VARIABLE(S) ENTERED ON STEP NUMBER 4.. SUBV22 IMPORT OF FLYING CG ACFT
 MULTIPLE R 0.72960
 R SQUARE 0.53332
 ADJUSTED R SQUARE 0.52843
 STANDARD ERROR 1.86039

ANALYSIS OF VARIANCE
 REGRESSION 71.978
 RESIDUAL 109.249
 TOTAL 181.227

MEAN SQUARE 629.53862
 F 184.39101
 SUM OF SQUARES 2198.15446
 DF 4
 MEAN 648.

REGRESSION LIST 1
 REGRESSION LIST 1

VARIABLE	B	BETA	STD ERROR B	F	PARTIAL TOLERANCE	BETA IN	VARIABLES NOT IN THE EQUATION
SUBV28	0.5636664	0.27107	0.06686	71.978	0.9271	0.9271	
SUBV05	0.5870008	0.31437	0.05390	109.249	0.9271	0.9271	
SUBV01	0.5257724	0.28594	0.05302	95.218	0.9271	0.9271	
SUBV22	0.6177930	0.32328	0.08280	55.665	0.9271	0.9271	
(CONSTANT)	-0.3300551				0.9271	0.9271	

SPSS BATCH SYSTEM
 FILE THESIS (CREATION DATE = 09/30/81)
 DEPENDENT VARIABLE.. CURB
 VARIABLE(S) ENTERED ON STEP NUMBER 6... SURVIV DISLIKE PAPERWK... THAN OTHERS
 MULTIPLE R 0.75567
 R SQUARE 0.57104
 ADJUSTED R SQUARE 0.56706
 STANDARD ERROR 1.76528

11/12/81 PAGE 19
 ANALYSIS OF VARIANCE
 REGRESSION 45.325
 RESIDUAL 91.328
 TOTAL 136.653
 CORRECTED TOTAL 136.653
 MEAN SQUARE 449.9421
 REGRESSION LIST 1
 VARIABLE LIST 1

----- VARIABLES IN THE EQUATION -----

VARIABLE	B	BETA	STD ERROR B	F
SURV29	0.952001	0.28110	0.06599	45.325
SURV05	0.287691	0.26630	0.05521	91.328
SURV21	0.494937	0.18236	0.03224	91.328
SURV26	0.319228	0.15296	0.02406	33.747
SURV18	0.348711	0.13362	0.03169	22.377
(CONSTANT)	-1.011193			

----- VARIABLES NOT IN THE EQUATION -----

VARIABLE	BETA IN	PARTIAL TOLERANCE	F
AGE	0.02522	0.01177	2.07
AGE2	0.00000	0.00000	0.00
AGE3	0.00000	0.00000	0.00
AGE4	0.00000	0.00000	0.00
AGE5	0.00000	0.00000	0.00
AGE6	0.00000	0.00000	0.00
AGE7	0.00000	0.00000	0.00
AGE8	0.00000	0.00000	0.00
AGE9	0.00000	0.00000	0.00
AGE10	0.00000	0.00000	0.00
AGE11	0.00000	0.00000	0.00
AGE12	0.00000	0.00000	0.00
AGE13	0.00000	0.00000	0.00
AGE14	0.00000	0.00000	0.00
AGE15	0.00000	0.00000	0.00
AGE16	0.00000	0.00000	0.00
AGE17	0.00000	0.00000	0.00
AGE18	0.00000	0.00000	0.00
AGE19	0.00000	0.00000	0.00
AGE20	0.00000	0.00000	0.00
AGE21	0.00000	0.00000	0.00
AGE22	0.00000	0.00000	0.00
AGE23	0.00000	0.00000	0.00
AGE24	0.00000	0.00000	0.00
AGE25	0.00000	0.00000	0.00
AGE26	0.00000	0.00000	0.00
AGE27	0.00000	0.00000	0.00
AGE28	0.00000	0.00000	0.00
AGE29	0.00000	0.00000	0.00
AGE30	0.00000	0.00000	0.00
AGE31	0.00000	0.00000	0.00
AGE32	0.00000	0.00000	0.00
AGE33	0.00000	0.00000	0.00
AGE34	0.00000	0.00000	0.00
AGE35	0.00000	0.00000	0.00
AGE36	0.00000	0.00000	0.00
AGE37	0.00000	0.00000	0.00
AGE38	0.00000	0.00000	0.00
AGE39	0.00000	0.00000	0.00
AGE40	0.00000	0.00000	0.00
AGE41	0.00000	0.00000	0.00
AGE42	0.00000	0.00000	0.00
AGE43	0.00000	0.00000	0.00
AGE44	0.00000	0.00000	0.00
AGE45	0.00000	0.00000	0.00
AGE46	0.00000	0.00000	0.00
AGE47	0.00000	0.00000	0.00
AGE48	0.00000	0.00000	0.00
AGE49	0.00000	0.00000	0.00
AGE50	0.00000	0.00000	0.00
AGE51	0.00000	0.00000	0.00
AGE52	0.00000	0.00000	0.00
AGE53	0.00000	0.00000	0.00
AGE54	0.00000	0.00000	0.00
AGE55	0.00000	0.00000	0.00
AGE56	0.00000	0.00000	0.00
AGE57	0.00000	0.00000	0.00
AGE58	0.00000	0.00000	0.00
AGE59	0.00000	0.00000	0.00
AGE60	0.00000	0.00000	0.00
AGE61	0.00000	0.00000	0.00
AGE62	0.00000	0.00000	0.00
AGE63	0.00000	0.00000	0.00
AGE64	0.00000	0.00000	0.00
AGE65	0.00000	0.00000	0.00
AGE66	0.00000	0.00000	0.00
AGE67	0.00000	0.00000	0.00
AGE68	0.00000	0.00000	0.00
AGE69	0.00000	0.00000	0.00
AGE70	0.00000	0.00000	0.00
AGE71	0.00000	0.00000	0.00
AGE72	0.00000	0.00000	0.00
AGE73	0.00000	0.00000	0.00
AGE74	0.00000	0.00000	0.00
AGE75	0.00000	0.00000	0.00
AGE76	0.00000	0.00000	0.00
AGE77	0.00000	0.00000	0.00
AGE78	0.00000	0.00000	0.00
AGE79	0.00000	0.00000	0.00
AGE80	0.00000	0.00000	0.00
AGE81	0.00000	0.00000	0.00
AGE82	0.00000	0.00000	0.00
AGE83	0.00000	0.00000	0.00
AGE84	0.00000	0.00000	0.00
AGE85	0.00000	0.00000	0.00
AGE86	0.00000	0.00000	0.00
AGE87	0.00000	0.00000	0.00
AGE88	0.00000	0.00000	0.00
AGE89	0.00000	0.00000	0.00
AGE90	0.00000	0.00000	0.00
AGE91	0.00000	0.00000	0.00
AGE92	0.00000	0.00000	0.00
AGE93	0.00000	0.00000	0.00
AGE94	0.00000	0.00000	0.00
AGE95	0.00000	0.00000	0.00
AGE96	0.00000	0.00000	0.00
AGE97	0.00000	0.00000	0.00
AGE98	0.00000	0.00000	0.00
AGE99	0.00000	0.00000	0.00
AGE100	0.00000	0.00000	0.00
AGE101	0.00000	0.00000	0.00
AGE102	0.00000	0.00000	0.00
AGE103	0.00000	0.00000	0.00
AGE104	0.00000	0.00000	0.00
AGE105	0.00000	0.00000	0.00
AGE106	0.00000	0.00000	0.00
AGE107	0.00000	0.00000	0.00
AGE108	0.00000	0.00000	0.00
AGE109	0.00000	0.00000	0.00
AGE110	0.00000	0.00000	0.00
AGE111	0.00000	0.00000	0.00
AGE112	0.00000	0.00000	0.00
AGE113	0.00000	0.00000	0.00
AGE114	0.00000	0.00000	0.00
AGE115	0.00000	0.00000	0.00
AGE116	0.00000	0.00000	0.00
AGE117	0.00000	0.00000	0.00
AGE118	0.00000	0.00000	0.00
AGE119	0.00000	0.00000	0.00
AGE120	0.00000	0.00000	0.00
AGE121	0.00000	0.00000	0.00
AGE122	0.00000	0.00000	0.00
AGE123	0.00000	0.00000	0.00
AGE124	0.00000	0.00000	0.00
AGE125	0.00000	0.00000	0.00
AGE126	0.00000	0.00000	0.00
AGE127	0.00000	0.00000	0.00
AGE128	0.00000	0.00000	0.00
AGE129	0.00000	0.00000	0.00
AGE130	0.00000	0.00000	0.00
AGE131	0.00000	0.00000	0.00
AGE132	0.00000	0.00000	0.00
AGE133	0.00000	0.00000	0.00
AGE134	0.00000	0.00000	0.00
AGE135	0.00000	0.00000	0.00
AGE136	0.00000	0.00000	0.00
AGE137	0.00000	0.00000	0.00
AGE138	0.00000	0.00000	0.00
AGE139	0.00000	0.00000	0.00
AGE140	0.00000	0.00000	0.00
AGE141	0.00000	0.00000	0.00
AGE142	0.00000	0.00000	0.00
AGE143	0.00000	0.00000	0.00
AGE144	0.00000	0.00000	0.00
AGE145	0.00000	0.00000	0.00
AGE146	0.00000	0.00000	0.00
AGE147	0.00000	0.00000	0.00
AGE148	0.00000	0.00000	0.00
AGE149	0.00000	0.00000	0.00
AGE150	0.00000	0.00000	0.00
AGE151	0.00000	0.00000	0.00
AGE152	0.00000	0.00000	0.00
AGE153	0.00000	0.00000	0.00
AGE154	0.00000	0.00000	0.00
AGE155	0.00000	0.00000	0.00
AGE156	0.00000	0.00000	0.00
AGE157	0.00000	0.00000	0.00
AGE158	0.00000	0.00000	0.00
AGE159	0.00000	0.00000	0.00
AGE160	0.00000	0.00000	0.00
AGE161	0.00000	0.00000	0.00
AGE162	0.00000	0.00000	0.00
AGE163	0.00000	0.00000	0.00
AGE164	0.00000	0.00000	0.00
AGE165	0.00000	0.00000	0.00
AGE166	0.00000	0.00000	0.00
AGE167	0.00000	0.00000	0.00
AGE168	0.00000	0.00000	0.00
AGE169	0.00000	0.00000	0.00
AGE170	0.00000	0.00000	0.00
AGE171	0.00000	0.00000	0.00
AGE172	0.00000	0.00000	0.00
AGE173	0.00000	0.00000	0.00
AGE174	0.00000	0.00000	0.00
AGE175	0.00000	0.00000	0.00
AGE176	0.00000	0.00000	0.00
AGE177	0.00000	0.00000	0.00
AGE178	0.00000	0.00000	0.00
AGE179	0.00000	0.00000	0.00
AGE180	0.00000	0.00000	0.00
AGE181	0.00000	0.00000	0.00
AGE182	0.00000	0.00000	0.00
AGE183	0.00000	0.00000	0.00
AGE184	0.00000	0.00000	0.00
AGE185	0.00000	0.00000	0.00
AGE186	0.00000	0.00000	0.00
AGE187	0.00000	0.00000	0.00
AGE188	0.00000	0.00000	0.00
AGE189	0.00000	0.00000	0.00
AGE190	0.00000	0.00000	0.00
AGE191	0.00000	0.00000	0.00
AGE192	0.00000	0.00000	0.00
AGE193	0.00000	0.00000	0.00
AGE194	0.00000	0.00000	0.00
AGE195	0.00000	0.00000	0.00
AGE196	0.00000	0.00000	0.00
AGE197	0.00000	0.00000	0.00
AGE198	0.00000	0.00000	0.00
AGE199	0.00000	0.00000	0.00
AGE200	0.00000	0.00000	0.00
AGE201	0.00000	0.00000	0.00
AGE202	0.00000	0.00000	0.00
AGE203	0.00000	0.00000	0.00
AGE204	0.00000	0.00000	0.00
AGE205	0.00000	0.00000	0.00
AGE206	0.00000	0.00000	0.00
AGE207	0.00000	0.00000	0.00
AGE208	0.00000	0.00000	0.00
AGE209	0.00000	0.00000	0.00
AGE210	0.00000	0.00000	0.00
AGE211	0.00000	0.00000	0.00
AGE212	0.00000	0.00000	0.00
AGE213	0.00000	0.00000	0.00
AGE214	0.00000	0.00000	0.00
AGE215	0.00000	0.00000	0.00
AGE216	0.00000	0.00000	0.00
AGE217	0.00000	0.00000	0.00
AGE218	0.00000	0.00000	0.00
AGE219	0.00000	0.0	

SPSS BATCH SYSTEM
 FILE THESIS (CREATION DATE = 09/30/81)
 * * * * * MULTIPLE REGRESSION * * * * * VARIABLE LIST 1
 DEPENDENT VARIABLE... COMB
 VARIABLE(S) ENTERED ON STEP NUMBER 7.. RANK RANK
 MULTIPLE R 0.76421
 R SQUARE 0.58402
 ADJUSTED R SQUARE 0.57950
 STANDARD ERROR 1.73572

11/12/81 PAGE 21

ANALYSIS OF VARIANCE OF REGRESSION RESIDUAL
 SUM OF SQUARES 199.78319
 MEAN SQUARE 28.54046
 DEGREE OF FREEDOM 7.0
 F 129.36394

VARIABLES IN THE EQUATION				VARIABLES NOT IN THE EQUATION			
VARIABLE	B	BETA	STD ERROR B	VARIABLE	BETA IN	PARTIAL TOLERANCE	F
SUBV28	0.3804799	0.18437	0.04661	AGE	0.00000	0.00000	0.00000
SUBV05	0.5305717	0.28150	0.05444	INCOME	0.00000	0.00000	0.00000
SUBV21	0.4487122	0.28156	0.05223	TEACHER	0.00000	0.00000	0.00000
SUBV22	0.9285135	0.18072	0.04973	TEACHER2	0.00000	0.00000	0.00000
SUBV29	0.3714251	0.12856	0.04079	ORBSCHOOL	0.00000	0.00000	0.00000
SUBV14	0.2813104	0.12608	0.04316	PSO	0.00000	0.00000	0.00000
(CONSTANT)	-2.002819			AMO	0.00000	0.00000	0.00000
				NONCOURS	0.00000	0.00000	0.00000
				NONCOURS2	0.00000	0.00000	0.00000
				OPOSIT	0.00000	0.00000	0.00000
				OPUSC	0.00000	0.00000	0.00000
				OPUSC2	0.00000	0.00000	0.00000
				OPUSC3	0.00000	0.00000	0.00000
				OPUSC4	0.00000	0.00000	0.00000
				OPUSC5	0.00000	0.00000	0.00000
				OPUSC6	0.00000	0.00000	0.00000
				OPUSC7	0.00000	0.00000	0.00000
				OPUSC8	0.00000	0.00000	0.00000
				OPUSC9	0.00000	0.00000	0.00000
				OPUSC10	0.00000	0.00000	0.00000
				OPUSC11	0.00000	0.00000	0.00000
				OPUSC12	0.00000	0.00000	0.00000
				OPUSC13	0.00000	0.00000	0.00000
				OPUSC14	0.00000	0.00000	0.00000
				OPUSC15	0.00000	0.00000	0.00000
				OPUSC16	0.00000	0.00000	0.00000
				OPUSC17	0.00000	0.00000	0.00000
				OPUSC18	0.00000	0.00000	0.00000
				OPUSC19	0.00000	0.00000	0.00000
				OPUSC20	0.00000	0.00000	0.00000
				OPUSC21	0.00000	0.00000	0.00000
				OPUSC22	0.00000	0.00000	0.00000
				OPUSC23	0.00000	0.00000	0.00000
				OPUSC24	0.00000	0.00000	0.00000
				OPUSC25	0.00000	0.00000	0.00000
				OPUSC26	0.00000	0.00000	0.00000
				OPUSC27	0.00000	0.00000	0.00000
				OPUSC28	0.00000	0.00000	0.00000
				OPUSC29	0.00000	0.00000	0.00000
				OPUSC30	0.00000	0.00000	0.00000
				OPUSC31	0.00000	0.00000	0.00000
				OPUSC32	0.00000	0.00000	0.00000
				OPUSC33	0.00000	0.00000	0.00000
				OPUSC34	0.00000	0.00000	0.00000
				OPUSC35	0.00000	0.00000	0.00000
				OPUSC36	0.00000	0.00000	0.00000
				OPUSC37	0.00000	0.00000	0.00000
				OPUSC38	0.00000	0.00000	0.00000
				OPUSC39	0.00000	0.00000	0.00000
				OPUSC40	0.00000	0.00000	0.00000
				OPUSC41	0.00000	0.00000	0.00000
				OPUSC42	0.00000	0.00000	0.00000
				OPUSC43	0.00000	0.00000	0.00000
				OPUSC44	0.00000	0.00000	0.00000
				OPUSC45	0.00000	0.00000	0.00000
				OPUSC46	0.00000	0.00000	0.00000
				OPUSC47	0.00000	0.00000	0.00000
				OPUSC48	0.00000	0.00000	0.00000
				OPUSC49	0.00000	0.00000	0.00000
				OPUSC50	0.00000	0.00000	0.00000
				OPUSC51	0.00000	0.00000	0.00000
				OPUSC52	0.00000	0.00000	0.00000
				OPUSC53	0.00000	0.00000	0.00000
				OPUSC54	0.00000	0.00000	0.00000
				OPUSC55	0.00000	0.00000	0.00000
				OPUSC56	0.00000	0.00000	0.00000
				OPUSC57	0.00000	0.00000	0.00000
				OPUSC58	0.00000	0.00000	0.00000
				OPUSC59	0.00000	0.00000	0.00000
				OPUSC60	0.00000	0.00000	0.00000
				OPUSC61	0.00000	0.00000	0.00000
				OPUSC62	0.00000	0.00000	0.00000
				OPUSC63	0.00000	0.00000	0.00000
				OPUSC64	0.00000	0.00000	0.00000
				OPUSC65	0.00000	0.00000	0.00000
				OPUSC66	0.00000	0.00000	0.00000
				OPUSC67	0.00000	0.00000	0.00000
				OPUSC68	0.00000	0.00000	0.00000
				OPUSC69	0.00000	0.00000	0.00000
				OPUSC70	0.00000	0.00000	0.00000
				OPUSC71	0.00000	0.00000	0.00000
				OPUSC72	0.00000	0.00000	0.00000
				OPUSC73	0.00000	0.00000	0.00000
				OPUSC74	0.00000	0.00000	0.00000
				OPUSC75	0.00000	0.00000	0.00000
				OPUSC76	0.00000	0.00000	0.00000
				OPUSC77	0.00000	0.00000	0.00000
				OPUSC78	0.00000	0.00000	0.00000
				OPUSC79	0.00000	0.00000	0.00000
				OPUSC80	0.00000	0.00000	0.00000
				OPUSC81	0.00000	0.00000	0.00000
				OPUSC82	0.00000	0.00000	0.00000
				OPUSC83	0.00000	0.00000	0.00000
				OPUSC84	0.00000	0.00000	0.00000
				OPUSC85	0.00000	0.00000	0.00000
				OPUSC86	0.00000	0.00000	0.00000
				OPUSC87	0.00000	0.00000	0.00000
				OPUSC88	0.00000	0.00000	0.00000
				OPUSC89	0.00000	0.00000	0.00000
				OPUSC90	0.00000	0.00000	0.00000
				OPUSC91	0.00000	0.00000	0.00000
				OPUSC92	0.00000	0.00000	0.00000
				OPUSC93	0.00000	0.00000	0.00000
				OPUSC94	0.00000	0.00000	0.00000
				OPUSC95	0.00000	0.00000	0.00000
				OPUSC96	0.00000	0.00000	0.00000
				OPUSC97	0.00000	0.00000	0.00000
				OPUSC98	0.00000	0.00000	0.00000
				OPUSC99	0.00000	0.00000	0.00000
				OPUSC100	0.00000	0.00000	0.00000

SPSS BATCH SYSTEM
 FILE THESIS (CREATION DATE = 09/30/81)
 * * * * * MULTIPLE REGRESSION * * * * * VARIABLE LIST 1
 DEPENDENT VARIABLE.. CUMB REGRESSION LIST 1

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SUMMARY TABLE

VARIABLE	MULTIPLE R	R SQUARE	R SQ CHANGE	SIMPLE R	B	BETA
SUR729	0.5986	0.3583	0.3583	0.5698	3.95317	0.17627
SUR730	0.5698	0.3247	0.1892	0.55625	0.23349	0.23093
SUR731	0.7273	0.5321	0.4899	0.30300	0.23949	0.28993
SUR732	0.7273	0.5321	0.4899	0.30300	0.23949	0.28993
SUR733	0.7273	0.5321	0.4899	0.30300	0.23949	0.28993
SUR734	0.7273	0.5321	0.4899	0.30300	0.23949	0.28993
BANK	0.1700	0.0293	0.0019	0.4014	0.00000	0.00000
CGA	0.1700	0.0293	0.0019	0.25013	0.00000	0.00000
(CONSTANT)					-1.91205	

SFSS BATCH SYSTEM

CPU TIME REQUIRED.. 7.09 SECONDS

NO FREQUENCIES
NO STATISTICS
NO COMMENTS
NO CORRECTIONS
NO COMMENTS
GENERAL - COMB
ALL
ANALYSIS OF THE VALUES OF COMB FOR
LTS AND LCORS

GIVEN WORKSPACE ALLOWS FOR 19200 VALUES AND 5760 LABELS PER VARIABLE FOR 'FREQUENCIES'

SPSS BATCH SISTER FILE - THESIS - CREATED 09/30/81

COMB

CODE	FREQUENCY	STD DEV	STD ERR	SKEWNESS	KURTOSIS	MINIMUM	MAXIMUM	RANGE	MEDIAN	VARIANCE
2.	123	9.103	0.851	-0.275	2.000	5.000	18.000	13.000	9.022	81.000
3.	47	2.767	0.221	-0.275	2.000	5.000	18.000	13.000	9.022	81.000
4.	61	2.190	0.174	-0.275	2.000	5.000	18.000	13.000	9.022	81.000
5.	47	2.767	0.221	-0.275	2.000	5.000	18.000	13.000	9.022	81.000
6.	134	9.103	0.851	-0.275	2.000	5.000	18.000	13.000	9.022	81.000
7.	63	2.767	0.221	-0.275	2.000	5.000	18.000	13.000	9.022	81.000
8.	76	2.767	0.221	-0.275	2.000	5.000	18.000	13.000	9.022	81.000
9.	43	2.767	0.221	-0.275	2.000	5.000	18.000	13.000	9.022	81.000
10.	100	9.103	0.851	-0.275	2.000	5.000	18.000	13.000	9.022	81.000
10.	2	9.103	0.851	-0.275	2.000	5.000	18.000	13.000	9.022	81.000

MEAN 5.951
 MODE 6.000
 KURTOSIS -0.275
 MINIMUM 2.000
 VALID CASES 696 MISSING CASES 0

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SPSS BATCH SYSTEM

CPU TIME REQUIRED.. 0.19 SECONDS

```
45 *SELECT IF (BANK GT 2 AND MARK LT 5)
46 *FREQUENCIES GENERAL = COMB
47 *STATISTICS ANALYSIS OF THE VALUES OF COMB FOR THE FAILED
48 *OF SECTION GROUP
49 COMMENT
GIVEN WORKSPACE ALLONS FOR 19200 VALUES AND 5760 LABELS PER VARIABLE FOR 'FREQUENCIES'
```

SPSS BATCH SYSTEM
 FILE THESIS (CREATION DATE = 09/30/81)

CUMB

CATEGORY LABEL	CODE	ABSOLUTE FREQ	RELATIVE FREQ (PCF)	ADJUSTED FREQ (PCF)	CUM FREQ (PCF)
	2.	70	18.3	18.3	18.3
	3.	26	6.8	6.8	25.1
	4.	41	10.7	10.7	35.9
	5.	26	6.8	6.8	42.7
	6.	80	20.9	20.9	63.6
	7.	40	10.5	10.5	74.1
	8.	40	10.5	10.5	84.6
	9.	17	4.5	4.5	89.0
	10.	40	10.5	10.5	99.5
	18.	2	0.5	0.5	100.0
	TOTAL	382	100.0	100.0	

MEAN	STD DEV	MEDIAN
5.709	9.133	5.950
0.000	2.498	16.000
2.000	18.000	

VALID CASES	MISSING CASES
382	0

SPSS BATCH SYSTEM

TRANSPACE REQUIRED: 100 BYTES
RECORD OPERATIONS
0 RECORD VALUES, LAG VARIABLES
9 IF/COMPARE OPERATIONS

CPU TIME REQUIRED.. 0.22 SECONDS

50 *SELECT IF
 51 (UNASSIGNED CT 3 AND RANK EQ 2) OR
 52 (UNASSIGNED CT 3 AND RANK EQ 3) OR
 53 (UNASSIGNED CT 3 AND RANK EQ 4) OR
 54 (UNASSIGNED CT 3 AND RANK EQ 4)
 55 GENERAL= COMB
 56 ALL
 57 3 7 8
 58 HYPOTHESIS 4 - ANALYSIS *****
 59 REGRESSION ANALYSIS DONE FOR HYPOTHESIS 2 *****
 60 SEE REGRESSION ANALYSIS FOR SENIOR OFFICERS *****
 61 ANALYSIS EXCLUDING SENIOR OFFICERS *****

GIVEN WORKSPACE ALLOWS FOR 19200 VALUES AND 5760 LABELS PER VARIABLE FOR 'FREQUENCIES'

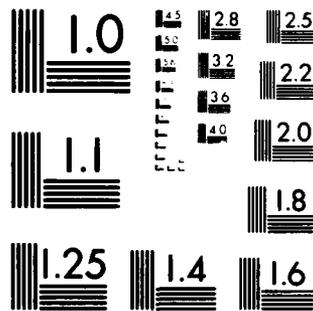
SPSS BATCH SYSTEM
11/12/81 FILE - THESIS - CREATED 09/30/81

COMB

CODE	FREQUENCY
1	1
2	3
3	2
4	1
5	2
6	3
8	1
9	1
10	1
11	1
12	1
13	1
14	1
15	1
16	1
17	1
18	1
19	1
20	1
21	1
22	1
23	1
24	1
25	1
26	1
27	1
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81	1
82	1
83	1
84	1
85	1
86	1
87	1
88	1
89	1
90	1
91	1
92	1
93	1
94	1
95	1
96	1
97	1
98	1
99	1
100	1

MEAN	STD DEV	STD ERR	MEDIAN
5.071	2.000	0.699	5.000
MODE	2.000	2.615	VARIANCE
KURTOSIS	-0.479	0.511	RANGE
SKEWNESS	2.000	10.000	
MINIMUM			
MAXIMUM			
VALID CASES	10	MISSING CASES	0

SPSS BATCH SYSTEM
FILE THESIS (CREATION DATE = 09/30/81) 11/12/81 PAGE 33
----- PEARSON CORRELATION COEFFICIENTS -----
RANK COMB
0.2818
f=0.000
f=0.000
(COEFFICIENT / (CASES) / SIGNIFICANCE) (A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

SPSS BATCH SYSTEM

TRANSPACE REQUIRED: 100 BYTES
1 TRANSFORMATIONS
0 RECORD VALUES, LAG VARIABLES
3 IF/COMPUTE OPERATIONS
CPU TIME REQUIRED.. 0.22 SECONDS

73 PEARSON CORR CORR WITH SURV16
***** PEARSON CORR PROBLEM REQUIRES 46 BYTES WORKSPACE *****

SPSS BATCH SYSTEM
FILE THESIS (CREATION DATE = 09/30/01)

----- PEARSON CORRELATION COEFFICIENTS -----

SURV16
CORO 0.2067
1.699
F=0.000

(COEFFICIENT / (CASES) / SIGNIFICANCE) (A VALUE OF 99.0000 IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

SPSS BATCH SYSTEM

CPU TIME REQUIRED.. 0.22 SECONDS

```

75 FREQUENCIES
76 STATIONS
77 OPTIMUMS
78 COMMENT
79 COMMENT
80 COMMENT
81 COMMENT

```

GENERAL = SURV04,SURV16

```

ALL
1
2
3
4
5
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14
15
16
17
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96
97
98
99
100

```

SYNTHESIS 7 - ANALYSIS
 SEE REGRESSION ANALYSIS DONE FOR STATIONS 2
 SYNTHESIS 8 - QUALITY
 SEE REGRESSION ANALYSIS DONE IN A SEPARATE PROGRAM
 SEE FOLLOWING APPENDIX

GIVEN WORKSPACE ALLOWS FOR 19200 VALUES AND 5760 LABELS PER VARIABLE FOR 'FREQUENCIES'

SPSS BATCH SYSTEM
11/12/81 FILE - THESIS - CREATED 09/30/81
SURVON AVERAGE FOUR LENGTH SHOULD BE----

```

CODE 1 ..... ( 449)
1. 1 LONGER
2. 1 ..... ( 234)
   2 ABOUT THE SAME
3. 1 ..... ( 5)
   2 SHORTER
9. 1 ..... ( 0)
(MISSING) 1 ..... ( 0)
FREQUENCY 100 ..... 300 ..... 400 ..... 500 ..... 600

```

MEAN	1.355	STD ERR	0.019	MEDIAN	1.266
MODE	1.000	STD DEV	0.936	VARIANCE	0.876
KURTOSIS	-0.929	SKEWNESS	0.790	RANGE	2.000
MINIMUM	1.000	MAXIMUM	3.000		
VALID CASES	600	MISSING CASES	8		

SPSS BATCH SYSTEM FILE - THESIS - CREATED 09/30/91

SURV16 BEST TOUR LENGTH IS-----

CODE	FREQUENCY
1. 1..... 60) 6 YEARS OR MORE	100
2. 1..... (133) 5 YEARS	200
3. 1..... (300) FOUR YEARS	300
4. 1..... 100) THREE YEARS	400
5. 1..... 5) TWO YEARS OR LESS	500
9. 1..... (2) (MISSING)	500

MEAN	STD DEV	STD ERR	MINIMUM	MAXIMUM	MEDIAN	VARIANCE	RANGE
2.702	3.000	0.032	0.000	5.000	2.999	0.722	4.000
VALID CASES	694	MISSING CASES	2				

SPSS BATCH SYSTEM

CPU TIME REQUIRED.. 0.20 SECONDS

02 FINISH

NORMAL END OF JOB.
02 CONTROL CARDS WERE PROCESSED.
0 ERRORS WERE DETECTED.

APPENDIX C

SPSS ANALYSIS PROGRAM AND OUTPUT FOR HYPOTHESIS 8

Notes:

1. Because of the limitations of the SPSS package, two preliminary regression analyses were done to identify significant contributors. These two are not included in this appendix. The regression herein is the last one mentioned in the text and includes significant variables from the two previous analyses.

2. Data retained on magnetic tape by Commandant (G-P-1/2) U.S. Coast Guard.

SPSS BATCH SYSTEM

SPSS FOR OS/360, VERSION 4, RELEASE 8.1, MAY 20, 1980

ORDER FROM MCGRAW-HILL: SPSS, 2ND ED., (PRACTICAL STATISTICAL DATA ANALYSIS) ORDER FROM SPSS INC. 1
SPSS PRIMER (FOR IBM TO SPSS)
SPSS UPDATE (USE 4/SPSS.2ND FOR VER. 7 & 8)

SPSS STATISTICAL ALGORITHMS
SPSS PRACTICAL GUIDE
METHODS: THE SPSS INC. BULLETIN

DEFAULT SPACE ALLOCATION.. 300 TRANSFORMATIONS
WORKSPACE 20000 BYTES 136 RECORD VALUES + LAG VARIABLES
TRANSSPACE 30000 BYTES 6166 IF/COMPARE OPERATIONS

ALLOWS FOR..

1 GET FILE SCII

EXPECTED FILE FOUND FILE SCII

FILE SCII HAS 246 VARIABLES
THE SUBFILES ARE..

NAME	NO OF CASES
SCII	103

CPU TIME REQUIRED.. 0.02 SECONDS

3 REGRESSION
 4
 5
 6
 7
 8
 9
 10
 11

VARIABLES = COMB
 STSC001 TO STSC1029
 STSC004, STSC115, STSC123, STSC100, STSC170, STSC059,
 STSC009, STSC132, STSC163, STSC223, STSC189, STSC079,
 STSC031, STSC176, STSC233,
 REGRESSION = COMB (10.00.0) WITH
 STSC001 TO STSC019
 STSC009, STSC132, STSC173, STSC100, STSC170, STSC059,
 STSC001, STSC116, STSC163, STSC223, STSC189, STSC079,
 STSC031, STSC176, STSC233

***** REGRESSION PROBLEM REQUIRES 35200 BYTES WORKSPACE, NOT INCLUDING RESIDUALS *****

SPSS BATCH SYSTEM
 FILE SCIT (CREATION DATE - 10/05/81)
 * * * * *
 DEPENDENT VARIABLE.. COMB
 VARIABLE(S) ENTERED ON STEP NUMBER 1.. STSCRO44
 MULTIPLE R 0.25124
 R SQUARE 0.06312
 ADJUSTED R SQUARE 0.03306
 STANDARD ERROR 2.36291

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VARIABLE LIST 1
 REGRESSION LIST 1

ANALYSIS OF VARIANCE BY
 REGRESSION 101.
 RESIDUAL 101.
 SUM OF SQUARES 45.67921
 MEAN SQUARE 663.41959
 F 6.80473

----- VARIABLES IN THE EQUATION -----

VARIABLE	B	BETA	STD ERROR B	F
STSCRO44 (CONSTANT)	-0.243231D-01	-0.25124	0.00933	6.805
	6.409425			

----- VARIABLES NOT IN THE EQUATION -----

VARIABLE	BETA IN	PARTIAL TOLERANCE	F
COMB	0.95587	0.7577	3.33
STSCRO44	0.00000	0.00000	0.00
STSCRO45	0.00000	0.00000	0.00
STSCRO46	0.00000	0.00000	0.00
STSCRO47	0.00000	0.00000	0.00
STSCRO48	0.00000	0.00000	0.00
STSCRO49	0.00000	0.00000	0.00
STSCRO50	0.00000	0.00000	0.00
STSCRO51	0.00000	0.00000	0.00
STSCRO52	0.00000	0.00000	0.00
STSCRO53	0.00000	0.00000	0.00
STSCRO54	0.00000	0.00000	0.00
STSCRO55	0.00000	0.00000	0.00
STSCRO56	0.00000	0.00000	0.00
STSCRO57	0.00000	0.00000	0.00
STSCRO58	0.00000	0.00000	0.00
STSCRO59	0.00000	0.00000	0.00
STSCRO60	0.00000	0.00000	0.00
STSCRO61	0.00000	0.00000	0.00
STSCRO62	0.00000	0.00000	0.00
STSCRO63	0.00000	0.00000	0.00
STSCRO64	0.00000	0.00000	0.00
STSCRO65	0.00000	0.00000	0.00
STSCRO66	0.00000	0.00000	0.00
STSCRO67	0.00000	0.00000	0.00
STSCRO68	0.00000	0.00000	0.00
STSCRO69	0.00000	0.00000	0.00
STSCRO70	0.00000	0.00000	0.00
STSCRO71	0.00000	0.00000	0.00
STSCRO72	0.00000	0.00000	0.00
STSCRO73	0.00000	0.00000	0.00
STSCRO74	0.00000	0.00000	0.00
STSCRO75	0.00000	0.00000	0.00
STSCRO76	0.00000	0.00000	0.00
STSCRO77	0.00000	0.00000	0.00
STSCRO78	0.00000	0.00000	0.00
STSCRO79	0.00000	0.00000	0.00
STSCRO80	0.00000	0.00000	0.00
STSCRO81	0.00000	0.00000	0.00
STSCRO82	0.00000	0.00000	0.00
STSCRO83	0.00000	0.00000	0.00
STSCRO84	0.00000	0.00000	0.00
STSCRO85	0.00000	0.00000	0.00
STSCRO86	0.00000	0.00000	0.00
STSCRO87	0.00000	0.00000	0.00
STSCRO88	0.00000	0.00000	0.00
STSCRO89	0.00000	0.00000	0.00
STSCRO90	0.00000	0.00000	0.00
STSCRO91	0.00000	0.00000	0.00
STSCRO92	0.00000	0.00000	0.00
STSCRO93	0.00000	0.00000	0.00
STSCRO94	0.00000	0.00000	0.00
STSCRO95	0.00000	0.00000	0.00
STSCRO96	0.00000	0.00000	0.00
STSCRO97	0.00000	0.00000	0.00
STSCRO98	0.00000	0.00000	0.00
STSCRO99	0.00000	0.00000	0.00
STSCRO00	0.00000	0.00000	0.00

SPSS BATCH SYSTEM
 FILE SC11 (CREATION DATE = 10/05/81)
 MULTIPLE REGRESSION VARIABLE LIST 1
 DEPENDENT VARIABLE.. COMB
 VARIABLE(S) ENTERED ON STEP NUMBER 2.. STSCH152
 MULTIPLE R 0.22173
 R SQUARE 0.49173
 ADJUSTED R SQUARE 0.46524
 STANDARD ERROR 2.51956

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ANALYSIS OF VARIANCE OF SUM OF SQUARES
 REGRESSION 106.732929
 RESIDUAL 636.82057
 MEAN SQUARE F
 2.51956 5.77296

----- VARIABLES IN THE EQUATION -----

VARIABLE	B	BETA	STD ERROR B	F
STSCH099	-0.202931D-01	-0.20293	0.00937	4.574
STSCH152	0.169032D-01	0.20533	0.00664	4.505
(CONSTANT)	5.204901			

----- VARIABLES NOT IN THE EQUATION -----

VARIABLE	BETA IN	PARTIAL TOLERANCE	F
STSCH001	0.24925	0.970935	0.67
STSCH002	0.05506	0.999999	0.00000
STSCH003	0.00000	0.000000	0.00000
STSCH004	0.00000	0.000000	0.00000
STSCH005	0.00000	0.000000	0.00000
STSCH006	0.00000	0.000000	0.00000
STSCH007	0.00000	0.000000	0.00000
STSCH008	0.00000	0.000000	0.00000
STSCH009	0.00000	0.000000	0.00000
STSCH010	0.00000	0.000000	0.00000
STSCH011	0.00000	0.000000	0.00000
STSCH012	0.00000	0.000000	0.00000
STSCH013	0.00000	0.000000	0.00000
STSCH014	0.00000	0.000000	0.00000
STSCH015	0.00000	0.000000	0.00000
STSCH016	0.00000	0.000000	0.00000
STSCH017	0.00000	0.000000	0.00000
STSCH018	0.00000	0.000000	0.00000
STSCH019	0.00000	0.000000	0.00000
STSCH020	0.00000	0.000000	0.00000
STSCH021	0.00000	0.000000	0.00000
STSCH022	0.00000	0.000000	0.00000
STSCH023	0.00000	0.000000	0.00000
STSCH024	0.00000	0.000000	0.00000
STSCH025	0.00000	0.000000	0.00000
STSCH026	0.00000	0.000000	0.00000
STSCH027	0.00000	0.000000	0.00000
STSCH028	0.00000	0.000000	0.00000
STSCH029	0.00000	0.000000	0.00000
STSCH030	0.00000	0.000000	0.00000
STSCH031	0.00000	0.000000	0.00000
STSCH032	0.00000	0.000000	0.00000
STSCH033	0.00000	0.000000	0.00000
STSCH034	0.00000	0.000000	0.00000
STSCH035	0.00000	0.000000	0.00000
STSCH036	0.00000	0.000000	0.00000
STSCH037	0.00000	0.000000	0.00000
STSCH038	0.00000	0.000000	0.00000
STSCH039	0.00000	0.000000	0.00000
STSCH040	0.00000	0.000000	0.00000
STSCH041	0.00000	0.000000	0.00000
STSCH042	0.00000	0.000000	0.00000
STSCH043	0.00000	0.000000	0.00000
STSCH044	0.00000	0.000000	0.00000
STSCH045	0.00000	0.000000	0.00000
STSCH046	0.00000	0.000000	0.00000
STSCH047	0.00000	0.000000	0.00000
STSCH048	0.00000	0.000000	0.00000
STSCH049	0.00000	0.000000	0.00000
STSCH050	0.00000	0.000000	0.00000
STSCH051	0.00000	0.000000	0.00000
STSCH052	0.00000	0.000000	0.00000
STSCH053	0.00000	0.000000	0.00000
STSCH054	0.00000	0.000000	0.00000
STSCH055	0.00000	0.000000	0.00000
STSCH056	0.00000	0.000000	0.00000
STSCH057	0.00000	0.000000	0.00000
STSCH058	0.00000	0.000000	0.00000
STSCH059	0.00000	0.000000	0.00000
STSCH060	0.00000	0.000000	0.00000
STSCH061	0.00000	0.000000	0.00000
STSCH062	0.00000	0.000000	0.00000
STSCH063	0.00000	0.000000	0.00000
STSCH064	0.00000	0.000000	0.00000
STSCH065	0.00000	0.000000	0.00000
STSCH066	0.00000	0.000000	0.00000
STSCH067	0.00000	0.000000	0.00000
STSCH068	0.00000	0.000000	0.00000
STSCH069	0.00000	0.000000	0.00000
STSCH070	0.00000	0.000000	0.00000
STSCH071	0.00000	0.000000	0.00000
STSCH072	0.00000	0.000000	0.00000
STSCH073	0.00000	0.000000	0.00000
STSCH074	0.00000	0.000000	0.00000
STSCH075	0.00000	0.000000	0.00000
STSCH076	0.00000	0.000000	0.00000
STSCH077	0.00000	0.000000	0.00000
STSCH078	0.00000	0.000000	0.00000
STSCH079	0.00000	0.000000	0.00000
STSCH080	0.00000	0.000000	0.00000
STSCH081	0.00000	0.000000	0.00000
STSCH082	0.00000	0.000000	0.00000
STSCH083	0.00000	0.000000	0.00000
STSCH084	0.00000	0.000000	0.00000
STSCH085	0.00000	0.000000	0.00000
STSCH086	0.00000	0.000000	0.00000
STSCH087	0.00000	0.000000	0.00000
STSCH088	0.00000	0.000000	0.00000
STSCH089	0.00000	0.000000	0.00000
STSCH090	0.00000	0.000000	0.00000
STSCH091	0.00000	0.000000	0.00000
STSCH092	0.00000	0.000000	0.00000
STSCH093	0.00000	0.000000	0.00000
STSCH094	0.00000	0.000000	0.00000
STSCH095	0.00000	0.000000	0.00000
STSCH096	0.00000	0.000000	0.00000
STSCH097	0.00000	0.000000	0.00000
STSCH098	0.00000	0.000000	0.00000

SPSS BATCH SYSTEM
 FILE SCII (CREATION DATE = 10/05/81)
 * * * * *
 DEPENDENT VARIABLE.. COMB
 VARIABLE(S) ENTERED ON STEP NUMBER 3.. STSCRI22
 MULTIPLE R 0.18834
 R SQUARE 0.15001
 ADJUSTED R SQUARE 0.12507
 STANDARD ERROR 2.46455

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VARIABLE LIST 1
 REGRESSION LIST 1

ANALYSIS OF VARIANCE
 REGRESSION 3.
 RESIDUAL 99.
 SUM OF SQUARES 106.78895
 MEAN SQUARE 35.59632
 F 5.86043

VARIABLES IN THE EQUATION				VARIABLES NOT IN THE EQUATION			
VARIABLE	B	BETA	STD ERROR B	F	BETA IN	PARTIAL TOLERANCE	F
STSCRI22	-0.187571D-01	-0.19373	0.00818	4.171	0.2350	0.2327	0.00000
(CONSTANT)	-0.1970639D-01	-0.21879	0.00839	5.514	0.00000	0.00000	0.00000

SPSS BATCH SYSTEM

FILE SCII (CREATION DATE = 10/05/81)

DEPENDENT VARIABLE.. COMB VARIABLE LIST 1

VARIABLE(S) ENTERED ON STEP NUMBER 5... STSC0026 REGRESSION LIST 1

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MULTIPLE R 0.50012
R SQUARE 0.25012
ADJUSTED R SQUARE 0.21146
STANDARD ERROR 2.33971

ANALYSIS OF VARIANCE
REGRESSION 97.
RESIDUAL 57.

SUR OF SQUARES
177.11375
531.00376

MEAN SQUARE
35.42255
5.76227

F 6.47074

----- VARIABLES IN THE EQUATION -----

VARIABLE	B	BETA	STD ERROR B	F
STSC004	-0.1145833D-01	-0.12041	0.00896	1.694
STSC012	-0.279042D-01	-0.30059	0.00857	10.514
STSC017	-0.259993D-01	-0.28290	0.00815	9.703
STSC018	-0.207732D-01	-0.22369	0.00778	6.921
STSC026	0.230837D-01	0.23779	0.00879	6.866
(CONSTANT)	5.410095			

----- VARIABLES NOT IN THE EQUATION -----

VARIABLE	BETA IN	PARTIAL	TOLERANCE	F
STSC001	0.0942	0.07630	0.0588	3.75
STSC002	-0.0580	-0.06311	0.0600	3.91
STSC003	-0.01097	-0.00200	0.0150	0.17
STSC004	-0.13908	-0.01543	0.0199	0.53
STSC005	-0.14929	-0.01607	0.0200	0.56
STSC006	-0.14929	-0.01607	0.0200	0.56
STSC007	-0.14929	-0.01607	0.0200	0.56
STSC008	-0.14929	-0.01607	0.0200	0.56
STSC009	-0.14929	-0.01607	0.0200	0.56
STSC010	-0.14929	-0.01607	0.0200	0.56
STSC011	-0.14929	-0.01607	0.0200	0.56
STSC012	-0.14929	-0.01607	0.0200	0.56
STSC013	-0.14929	-0.01607	0.0200	0.56
STSC014	-0.14929	-0.01607	0.0200	0.56
STSC015	-0.14929	-0.01607	0.0200	0.56
STSC016	-0.14929	-0.01607	0.0200	0.56
STSC017	-0.14929	-0.01607	0.0200	0.56
STSC018	-0.14929	-0.01607	0.0200	0.56
STSC019	-0.14929	-0.01607	0.0200	0.56
STSC020	-0.14929	-0.01607	0.0200	0.56
STSC021	-0.14929	-0.01607	0.0200	0.56
STSC022	-0.14929	-0.01607	0.0200	0.56
STSC023	-0.14929	-0.01607	0.0200	0.56
STSC024	-0.14929	-0.01607	0.0200	0.56
STSC025	-0.14929	-0.01607	0.0200	0.56
STSC026	-0.14929	-0.01607	0.0200	0.56
STSC027	-0.14929	-0.01607	0.0200	0.56
STSC028	-0.14929	-0.01607	0.0200	0.56
STSC029	-0.14929	-0.01607	0.0200	0.56
STSC030	-0.14929	-0.01607	0.0200	0.56
STSC031	-0.14929	-0.01607	0.0200	0.56
STSC032	-0.14929	-0.01607	0.0200	0.56
STSC033	-0.14929	-0.01607	0.0200	0.56
STSC034	-0.14929	-0.01607	0.0200	0.56
STSC035	-0.14929	-0.01607	0.0200	0.56
STSC036	-0.14929	-0.01607	0.0200	0.56
STSC037	-0.14929	-0.01607	0.0200	0.56
STSC038	-0.14929	-0.01607	0.0200	0.56
STSC039	-0.14929	-0.01607	0.0200	0.56
STSC040	-0.14929	-0.01607	0.0200	0.56
STSC041	-0.14929	-0.01607	0.0200	0.56
STSC042	-0.14929	-0.01607	0.0200	0.56
STSC043	-0.14929	-0.01607	0.0200	0.56
STSC044	-0.14929	-0.01607	0.0200	0.56
STSC045	-0.14929	-0.01607	0.0200	0.56
STSC046	-0.14929	-0.01607	0.0200	0.56
STSC047	-0.14929	-0.01607	0.0200	0.56
STSC048	-0.14929	-0.01607	0.0200	0.56
STSC049	-0.14929	-0.01607	0.0200	0.56
STSC050	-0.14929	-0.01607	0.0200	0.56
STSC051	-0.14929	-0.01607	0.0200	0.56
STSC052	-0.14929	-0.01607	0.0200	0.56
STSC053	-0.14929	-0.01607	0.0200	0.56
STSC054	-0.14929	-0.01607	0.0200	0.56
STSC055	-0.14929	-0.01607	0.0200	0.56
STSC056	-0.14929	-0.01607	0.0200	0.56
STSC057	-0.14929	-0.01607	0.0200	0.56
STSC058	-0.14929	-0.01607	0.0200	0.56
STSC059	-0.14929	-0.01607	0.0200	0.56
STSC060	-0.14929	-0.01607	0.0200	0.56
STSC061	-0.14929	-0.01607	0.0200	0.56
STSC062	-0.14929	-0.01607	0.0200	0.56
STSC063	-0.14929	-0.01607	0.0200	0.56
STSC064	-0.14929	-0.01607	0.0200	0.56
STSC065	-0.14929	-0.01607	0.0200	0.56
STSC066	-0.14929	-0.01607	0.0200	0.56
STSC067	-0.14929	-0.01607	0.0200	0.56
STSC068	-0.14929	-0.01607	0.0200	0.56
STSC069	-0.14929	-0.01607	0.0200	0.56
STSC070	-0.14929	-0.01607	0.0200	0.56
STSC071	-0.14929	-0.01607	0.0200	0.56
STSC072	-0.14929	-0.01607	0.0200	0.56
STSC073	-0.14929	-0.01607	0.0200	0.56
STSC074	-0.14929	-0.01607	0.0200	0.56
STSC075	-0.14929	-0.01607	0.0200	0.56
STSC076	-0.14929	-0.01607	0.0200	0.56
STSC077	-0.14929	-0.01607	0.0200	0.56
STSC078	-0.14929	-0.01607	0.0200	0.56
STSC079	-0.14929	-0.01607	0.0200	0.56
STSC080	-0.14929	-0.01607	0.0200	0.56
STSC081	-0.14929	-0.01607	0.0200	0.56
STSC082	-0.14929	-0.01607	0.0200	0.56
STSC083	-0.14929	-0.01607	0.0200	0.56
STSC084	-0.14929	-0.01607	0.0200	0.56
STSC085	-0.14929	-0.01607	0.0200	0.56
STSC086	-0.14929	-0.01607	0.0200	0.56
STSC087	-0.14929	-0.01607	0.0200	0.56
STSC088	-0.14929	-0.01607	0.0200	0.56
STSC089	-0.14929	-0.01607	0.0200	0.56
STSC090	-0.14929	-0.01607	0.0200	0.56
STSC091	-0.14929	-0.01607	0.0200	0.56
STSC092	-0.14929	-0.01607	0.0200	0.56
STSC093	-0.14929	-0.01607	0.0200	0.56
STSC094	-0.14929	-0.01607	0.0200	0.56
STSC095	-0.14929	-0.01607	0.0200	0.56
STSC096	-0.14929	-0.01607	0.0200	0.56
STSC097	-0.14929	-0.01607	0.0200	0.56
STSC098	-0.14929	-0.01607	0.0200	0.56
STSC099	-0.14929	-0.01607	0.0200	0.56
STSC100	-0.14929	-0.01607	0.0200	0.56

F-LEVEL OR TOLERANCE-LEVEL INSUFFICIENT FOR FURTHER COMPUTATION
STATISTICS WHICH CANNOT BE COMPUTED ARE PRINTED AS ALL NINES.

SPSS BATCH SYSTEM
 FILE SCII (CREATION DATE = 10/05/91)
 * * * * * MULTIPLE REGRESSION * * * * * VARIABLE LIST 1
 DEPENDENT VARIABLE.. COND REPRESSION LIST 1

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SUMMARY TABLE

VARIABLE	MULTIPLE R	R SQUARE	MSU CHANGE	SIMPLE R	B	BETA
S1SCR094	0.35173	0.06312	0.6312	-0.35124	-0.16533	-0.17093
S1SCR093	0.32039	0.04730	0.04730	-0.32023	-0.17552	-0.18030
S1SCR092	0.30030	0.04041	0.04041	-0.30025	-0.23953	-0.24200
S1SCR091	0.50012	0.25012	0.05031	-0.16001	5.41095	-0.23179
(CONSTANT)						

SPSS BATCH SYSTEM

CPU TIME REQUIRED.. 0.61 SECONDS

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12 FINISH

NORMAL END OF JOB
12 CONTROL CARDS WERE PROCESSED.
0 ERRORS WERE DETECTED.

APPENDIX D

FREQUENCY DISTRIBUTIONS FOR RESPONSES TO ALL QUESTIONNAIRE ITEMS

Note: Missing values not included in calculation of distribution statistics.

11/13/81

FILE - THESIS - CREATED 09/30/81

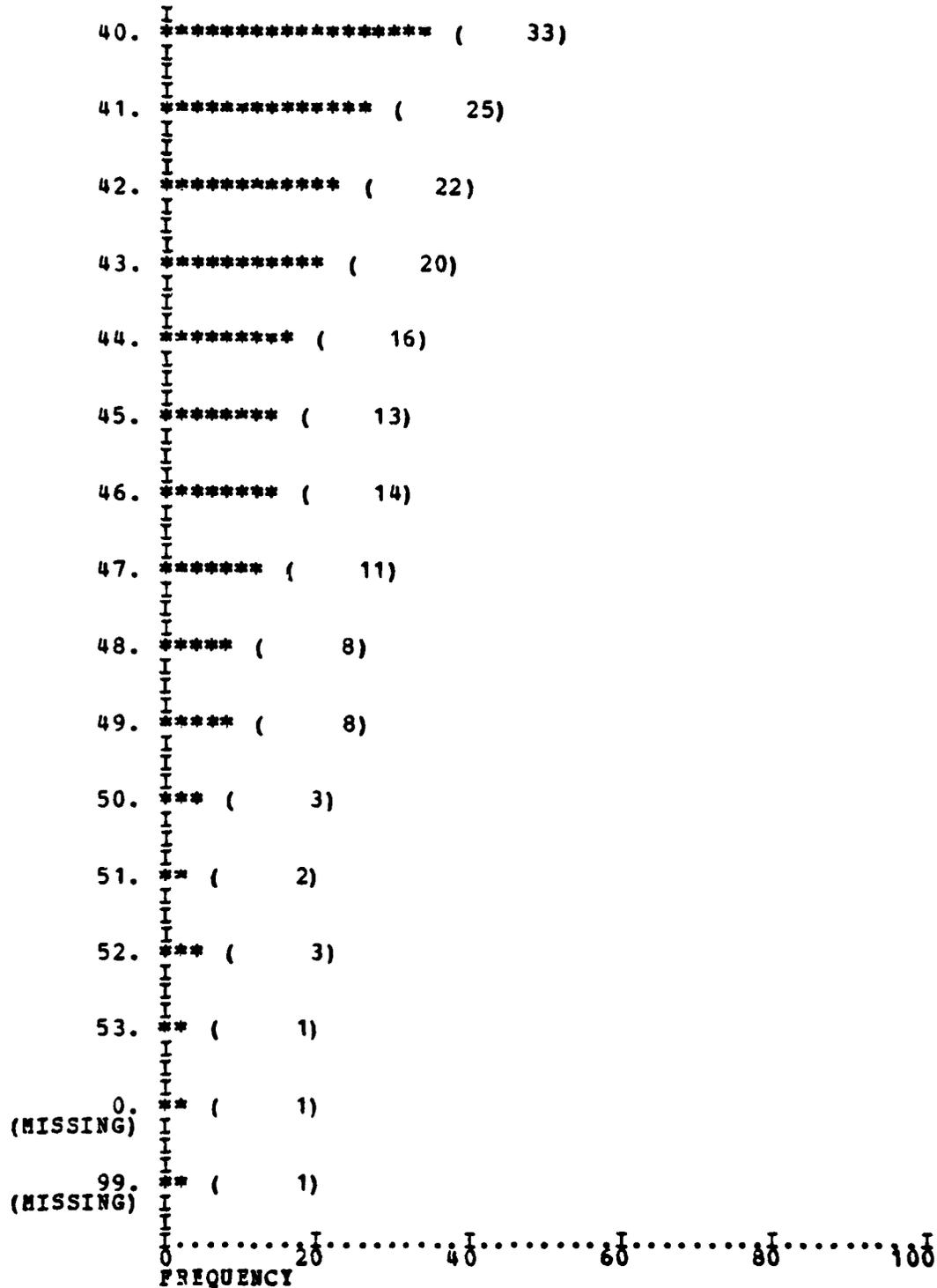
AGE AGE OF RESPONDENT

CODE

```
I
24. ** ( 1)
I
I
25. ***** ( 15)
I
I
26. ***** ( 20)
I
I
27. ***** ( 35)
I
I
28. ***** ( 33)
I
I
29. ***** ( 22)
I
I
30. ***** ( 34)
I
I
31. ***** ( 39)
I
I
32. ***** ( 51)
I
I
33. ***** ( 47)
I
I
34. ***** ( 57)
I
I
35. ***** ( 35)
I
I
36. ***** ( 28)
I
I
37. ***** ( 36)
I
I
38. ***** ( 32)
I
I
39. ***** ( 30)
I
```

11/13/81

FILE - THESIS - CREATED 09/30/81



11/13/81

FILE - THESIS - CREATED 09/30/81

MEAN	35.365	STD ERR	0.233	MEDIAN	34.377
MODE	34.000	STD DEV	6.145	VARIANCE	37.764
KURTOSIS	-0.459	SKEWNESS	0.430	RANGE	29.000
MINIMUM	24.000	MAXIMUM	53.000		
VALID CASES	694	MISSING CASES	2		

11/13/81

FILE - THESIS - CREATED 09/30/81

RANK RANK

CODE

```

1. *** ( 6)
   I
   I  ENS
   I
2. ***** ( 112)
   I
   I  LTJG
   I
3. ***** ( 199)
   I
   I  LTO3
   I
4. ***** ( 183)
   I
   I  LCDR
   I
5. ***** ( 136)
   I
   I  CDR
   I
6. ***** ( 60)
   I
   I  CAPT
   I
   I
   I.....I.....I.....I.....I
   O          40          80          120          160          200
FREQUENCY

```

MEAN	3.734	STD ERR	0.046	MEDIAN	3.669
MODE	3.000	STD DEV	1.216	VARIANCE	1.479
KURTOSIS	-0.798	SKEWNESS	0.154	RANGE	5.000
MINIMUM	1.000	MAXIMUM	6.000		
VALID CASES	696	MISSING CASES	0		

11/13/81

FILE - THESIS - CREATED 09/30/81

YRSINGRD YEARS IN GRADE

CODE	FREQUENCY
1.	153
2.	171
3.	152
4.	106
5.	53
6.	29
7.	14
8.	9
9.	8
0. (MISSING)	1

MEAN	2.958	STD ERR	0.066	MEDIAN	2.655
MODE	2.000	STD DEV	1.739	VARIANCE	3.023
KURTOSIS	1.144	SKEWNESS	1.081	RANGE	8.000
MINIMUM	1.000	MAXIMUM	9.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

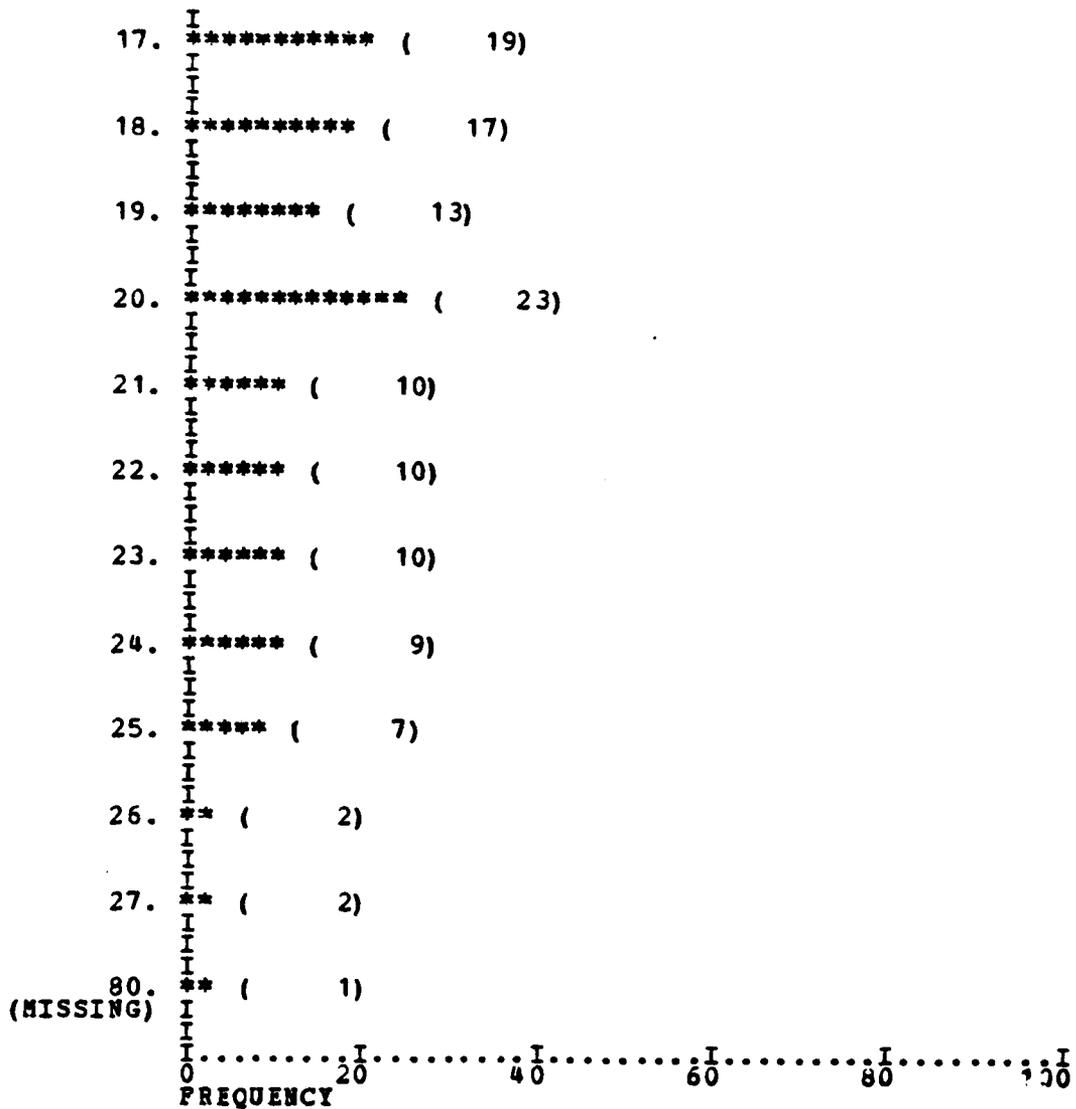
YRSAVTR YEARS AS AN AVIATOR

CODE

- 1. I ***** (12)
I
- 2. I ***** (33)
I
- 3. I ***** (32)
I
- 4. I ***** (29)
I
- 5. I ***** (36)
I
- 6. I ***** (28)
I
- 7. I ***** (32)
I
- 8. I ***** (33)
I
- 9. I ***** (38)
I
- 10. I ***** (48)
I
- 11. I ***** (37)
I
- 12. I ***** (52)
I
- 13. I ***** (46)
I
- 14. I ***** (46)
I
- 15. I ***** (41)
I
- 16. I ***** (30)
I

11/13/81

FILE - THESIS - CREATED 09/30/81



MEAN	11.236	STD ERR	0.223	MEDIAN	11.216
MODE	12.000	STD DEV	5.891	VARIANCE	34.699
KURTOSIS	-0.501	SKEWNESS	0.296	RANGE	26.000
MINIMUM	1.000	MAXIMUM	27.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

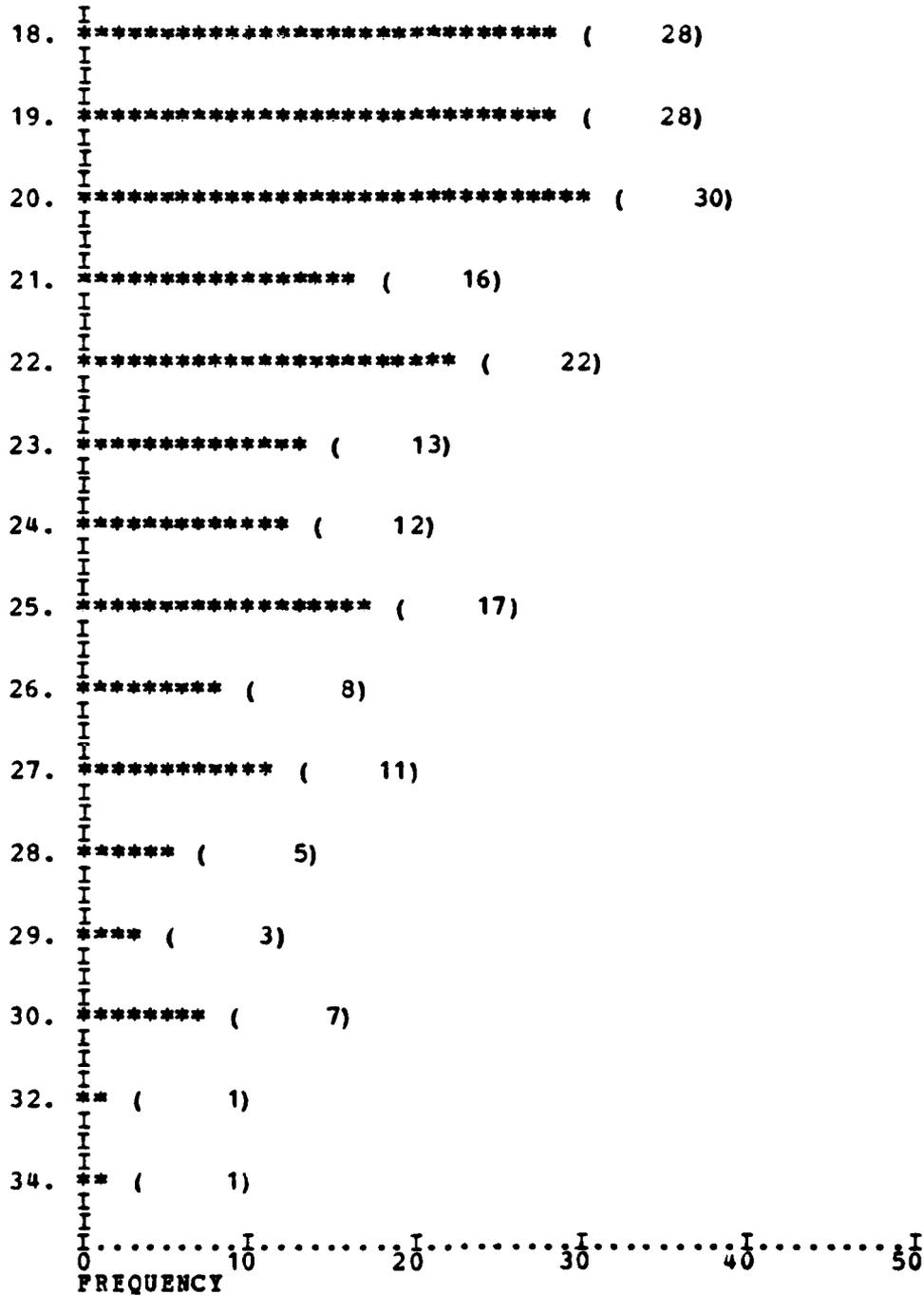
YRSERV TOTAL YEARS OF SERVICE

CODE

- 2. I ***** (5)
I
I
- 3. I ***** (7)
I
I
- 4. I ***** (24)
I
I
- 5. I ***** (34)
I
I
- 6. I ***** (27)
I
I
- 7. I ***** (25)
I
I
- 8. I ***** (32)
I
I
- 9. I ***** (39)
I
I
- 10. I ***** (48)
I
I
- 11. I ***** (49)
I
I
- 12. I ***** (31)
I
I
- 13. I ***** (43)
I
I
- 14. I ***** (32)
I
I
- 15. I ***** (34)
I
I
- 16. I ***** (39)
I
I
- 17. I ***** (25)
I
I

11/13/81

FILE - THESIS - CREATED 09/30/81



MEAN	13.899	STD ERR	0.247	MEDIAN	13.129
MODE	11.000	STD DEV	6.515	VARIANCE	42.442
KURTOSIS	-0.475	SKEWNESS	0.424	RANGE	32.000
MINIMUM	2.000	MAXIMUM	34.000		

VALID CASES 696 MISSING CASES 0

120

11/13/81

FILE - THESIS - CREATED 09/30/81

OBSERV COMPLETED OBLIGATED SERVICE

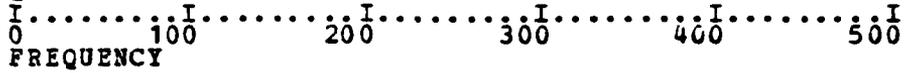
CODE

0. ***** (481)

YES

1. ***** (215)

NO



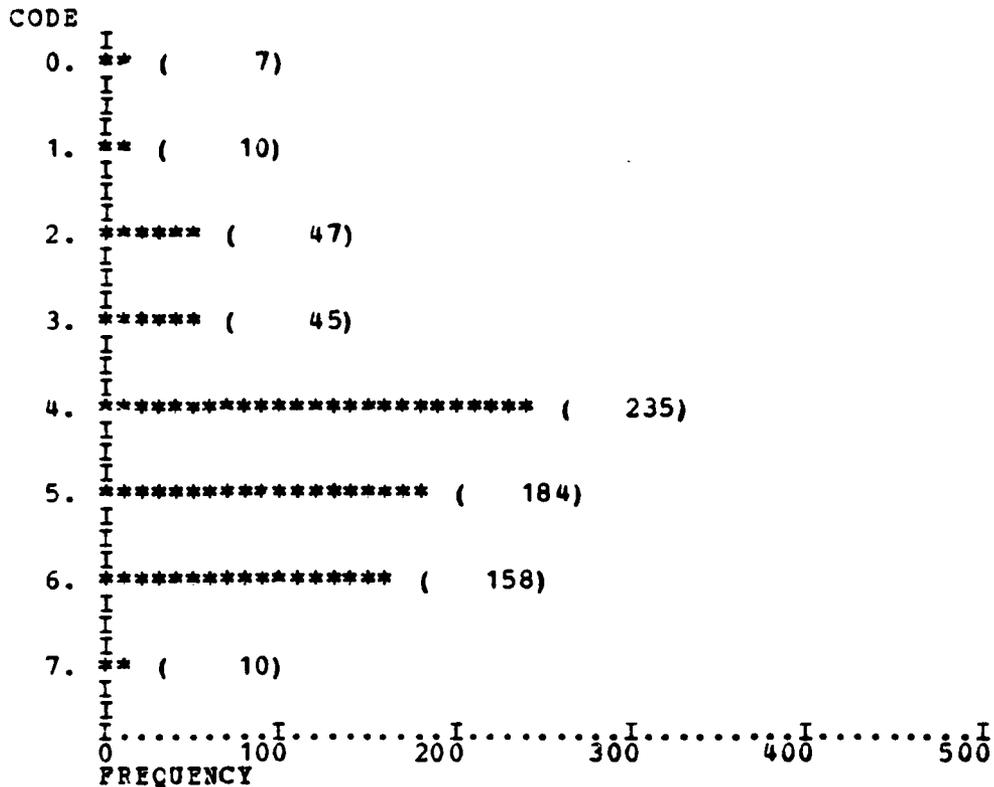
MEAN	0.309	STD ERR	0.018	MEDIAN	0.223
MODE	0.0	STD DEV	0.462	VARIANCE	0.214
KUPTOSIS	-1.317	SKEWNESS	0.829	RANGE	1.000
MINIMUM	0.0	MAXIMUM	1.000		

VALID CASES	696	MISSING CASES	0
-------------	-----	---------------	---

11/13/81

FILE - THESIS - CREATED 09/30/81

YRSCOLL YEARS OF COLLEGE OR EQUIVLENT



MEAN	4.478	STD ERR	0.049	MEDIAN	4.522
MODE	4.000	STD DEV	1.304	VARIANCE	1.700
KURTOSIS	0.775	SKEWNESS	-0.777	RANGE	7.000
MINIMUM	0.0	MAXIMUM	7.000		
VALID CASES	696	MISSING CASES	0		

11/13/81

FILE - THESIS - CREATED 09/30/81

PGDEG TYPE OF POSTGRADUATE DEGREE

CODE

0. ***** (508)

NONE

1. *** (41)

MBA

2. ***** (88)

MS

3. *** (47)

MA

4. * (1)

LAW

7. * (1)

OTHER

9. ** (10)
PHD OR MORE THAN ONE MASTERS DEGREE

0.....200.....400.....600.....800.....1000
FREQUENCY

MEAN	0.659	STD ERR	0.054	MEDIAN	0.185
MODE	0.0	STD DEV	1.413	VARIANCE	1.998
KURTOSIS	15.873	SKEWNESS	3.458	RANGE	9.000
MINIMUM	0.0	MAXIMUM	9.000		
VALID CASES	696	MISSING CASES	0		

11/13/81

FILE - THESIS - CREATED 09/30/81

PGFUND SOURCE OF FUNDING FOR POSTGRADUATE WORK

CODE

0. ***** (339)
I NOT APPLICABLE
I
I

1. ***** (239)
I WENT ON OWN
I
I

2. ***** (118)
I SENT BY COAST GUARD
I
I

I.....I.....I.....I.....I.....I
0 100 200 300 400 500
FREQUENCY

MEAN	0.682	STD ERR	0.028	MEDIAN	0.538
MODE	0.0	STD DEV	0.746	VARIANCE	0.557
KURTOSIS	-0.991	SKEWNESS	0.590	RANGE	2.000
MINIMUM	0.0	MAXIMUM	2.000		
VALID CASES	696	MISSING CASES	0		

11/13/81

FILE - THESIS - CREATED 09/30/81

ACFT PRIMARY AIRCRAFT FLOWN

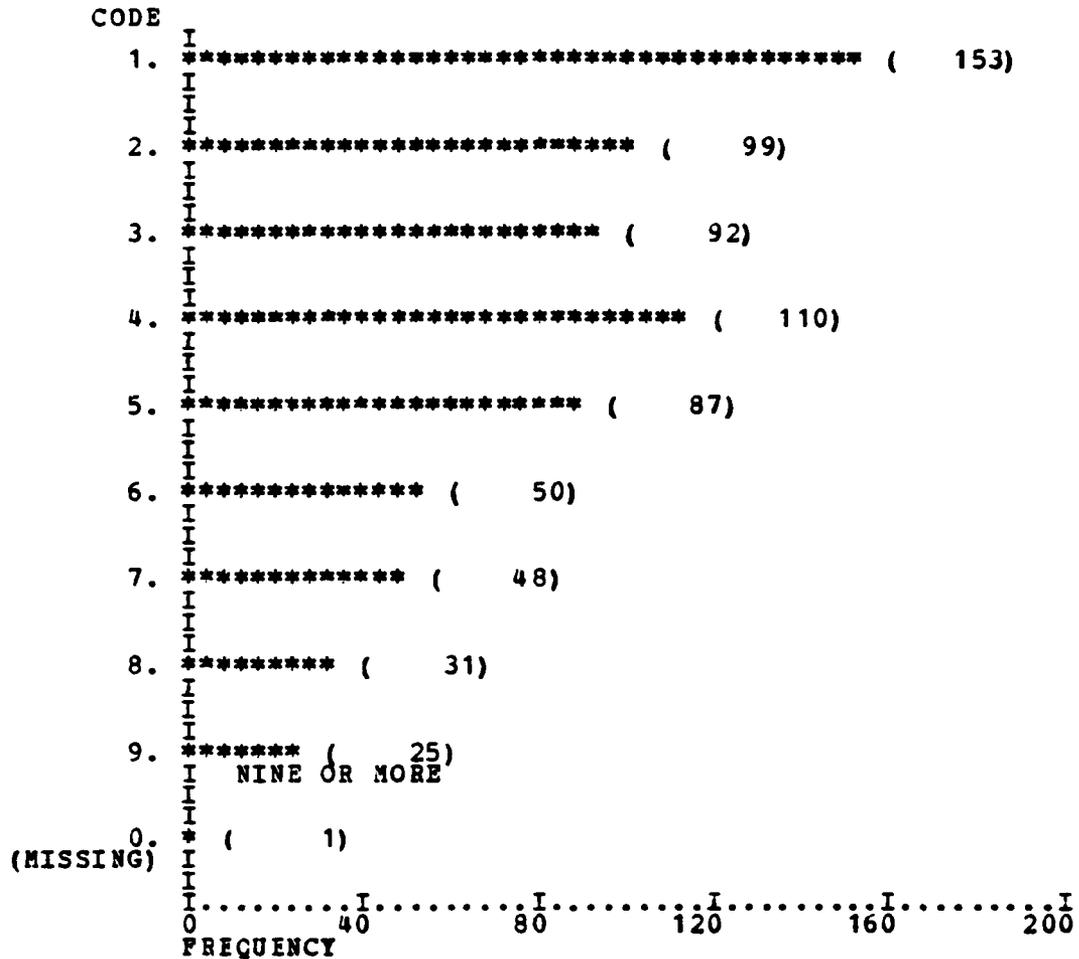
CODE	FREQUENCY
1. ***** (287) HH-52	
2. ***** (150) HH-3F	
3. ***** (142) C-131 OR HU-16	
4. ***** (115) C-130	
9. (2) (MISSING)	

MEAN	2.122	STD ERR	0.043	MEDIAN	1.900
MODE	1.000	STD DEV	1.126	VARIANCE	1.268
KURTOSIS	-1.230	SKEWNESS	0.457	RANGE	3.000
MINIMUM	1.000	MAXIMUM	4.000		
VALID CASES	694	MISSING CASES	2		

11/13/81

FILE - THESIS - CREATED 09/30/81

NOTOURS NUMBER OF TOURS SINCE FLIGHT SCHOOL

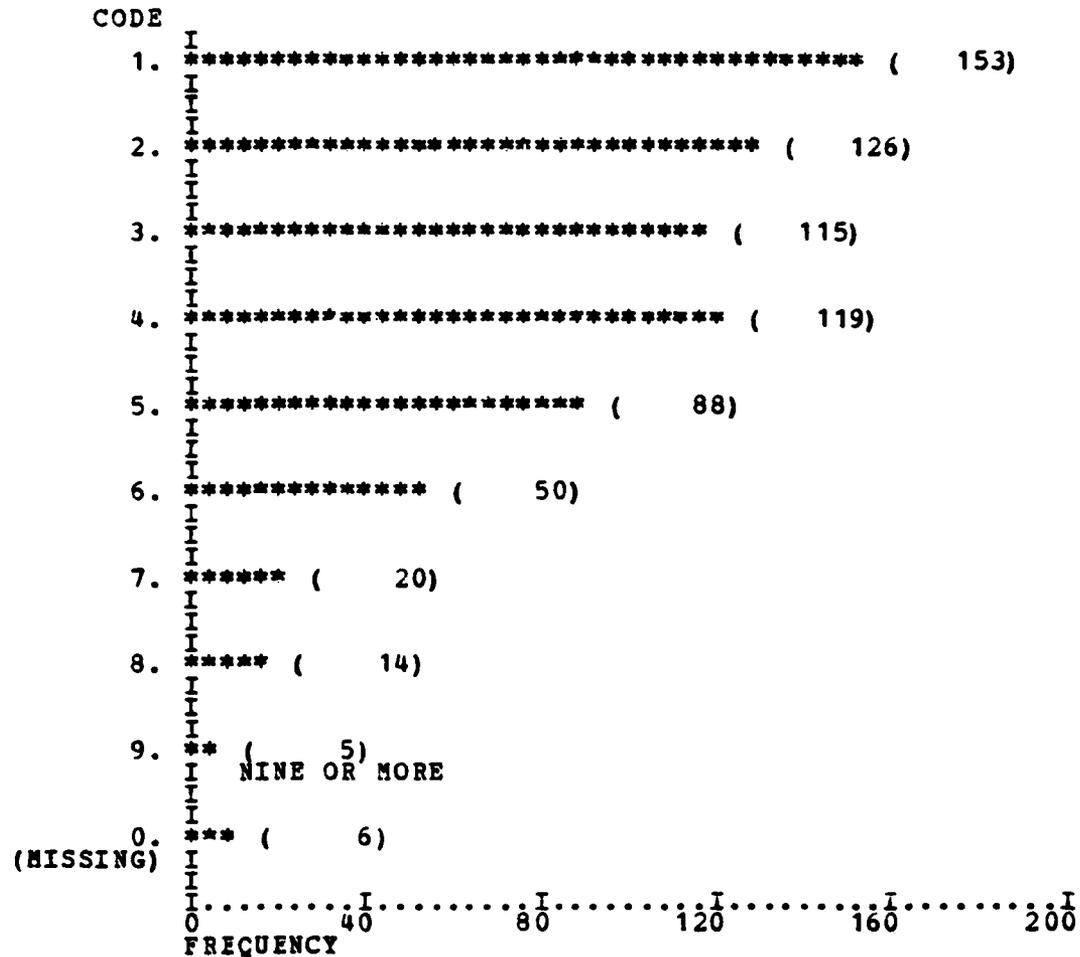


MEAN	3.757	STD ERR	0.087	MEDIAN	3.532
MODE	1.000	STD DEV	2.298	VARIANCE	5.279
KURTOSIS	-0.638	SKEWNESS	0.543	RANGE	8.000
MINIMUM	1.000	MAXIMUM	9.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

NOFLTRS NUMBER OF DIFOPS TOURS

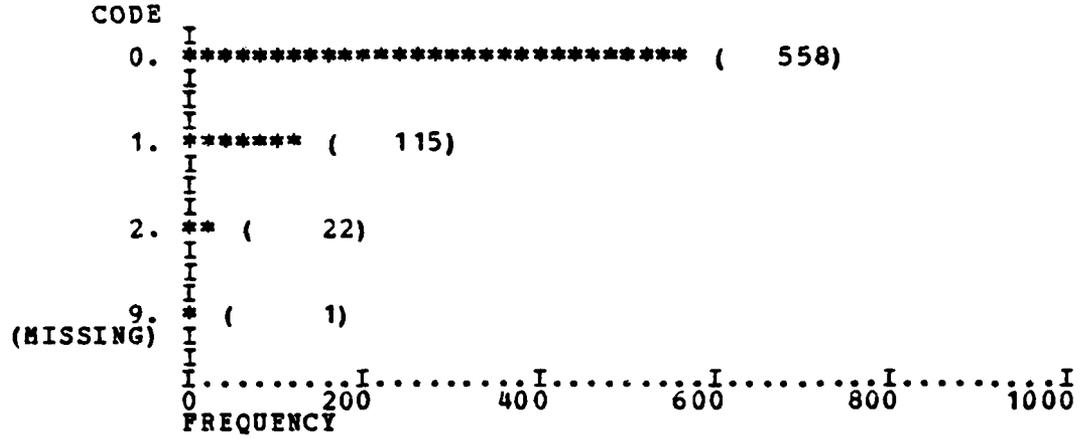


MEAN	3.280	STD ERR	0.072	MEDIAN	3.074
MODE	1.000	STD DEV	1.998	VARIANCE	3.563
KURTOSIS	-0.229	SKEWNESS	0.618	RANGE	8.000
MINIMUM	1.000	MAXIMUM	9.000		
VALID CASES	690	MISSING CASES	6		

11/13/81

FILE - THESIS - CREATED 09/30/81

HQ NUMBER OF HEADQUARTERS TOURS



MEAN	0.229	STD ERR	0.019	MEDIAN	0.123
MODE	0.0	STD DEV	0.490	VARIANCE	0.240
KURTOSIS	3.511	SKEWNESS	2.068	RANGE	2.000
MINIMUM	0.0	MAXIMUM	2.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

DIST NUMBER OF DISTRICT OR AREA STAFF TOURS

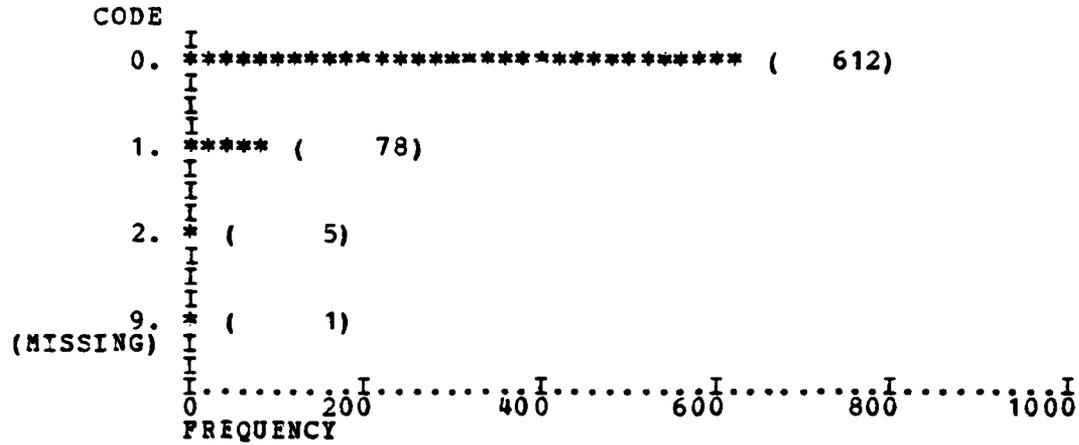
CODE	FREQUENCY
0.	637
1.	48
2.	8
3.	2
9. (MISSING)	1

MEAN	0.101	STD ERR	0.014	MEDIAN	0.046
MODE	0.0	STD DEV	0.362	VARIANCE	0.131
KURTOSIS	20.418	SKEWNESS	4.198	RANGE	3.000
MINIMUM	0.0	MAXIMUM	3.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

PGWCOLL NUMBER OF TOURS AT PG SCHOOL AND/OR WAR AND STAFF COLLEGES

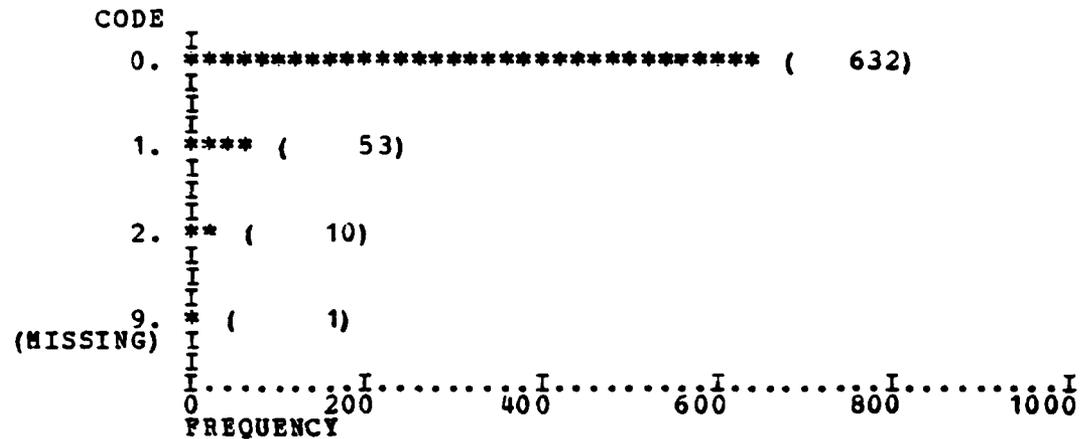


MEAN	0.127	STD ERR	0.013	MEDIAN	0.068
MODE	0.0	STD DEV	0.354	VARIANCE	0.125
KURTOSIS	6.927	SKEWNESS	2.728	RANGE	2.000
MINIMUM	0.0	MAXIMUM	2.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

TOUROTH OTHER TOURS



MEAN	0.105	STD ERR	0.013	MEDIAN	0.050
MODE	0.0	STD DEV	0.351	VARIANCE	0.123
KURTOSIS	12.659	SKEWNESS	3.529	RANGE	2.000
MINIMUM	0.0	MAXIMUM	2.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

ASPOSIT HIGHEST POSITION AT AIR STATION

CODE	FREQUENCY
0. ***** (309) DUTY	309
1. ***** (62) COMMANDING OFFICER	62
2. ***** (42) EXECUTIVE OFFICER	42
3. ***** (50) OPERATIONS OFFICER	50
4. ***** (58) ENGINEERING OFFICER	58
5. ***** (174) DEPARTMENT HEAD	174
9. * (1) (MISSING)	1

MEAN	2.012	STD ERR	0.081	MEDIAN	1.121
MODE	0.0	STD DEV	2.129	VARIANCE	4.533
KURTOSIS	-1.601	SKEWNESS	0.385	RANGE	5.000
MINIMUM	0.0	MAXIMUM	5.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

OPOSIT HIGHEST POSITION HELD AT NON-AIR STATION

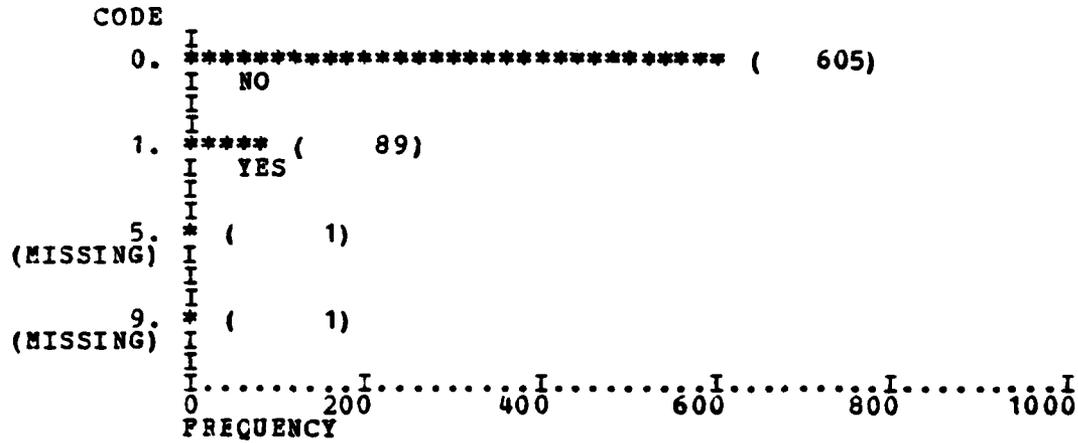
CODE	I				
0.	I	***** (595)			
	I	NOT APPLICABLE			
	I				
1.	I	** (20)			
	I	COMMANDING OFFICER			
	I				
2.	I	** (23)			
	I	EXECUTIVE OFFICER			
	I				
3.	I	** (10)			
	I	OPERATIONS OFFICER			
	I				
4.	I	* (3)			
	I	ENGINEERING OFFICER			
	I				
5.	I	*** (44)			
	I	DEPARTMENT HEAD			
	I				
9.	I	* (1)			
(MISSING)	I				
	I				
	II.....I.....I.....I.....I			
	I	0.....200.....400.....600.....800.....1000			
	I	FREQUENCY			

MEAN	0.472	STD ERR	0.050	MEDIAN	0.084
MODE	0.0	STD DEV	1.312	VARIANCE	1.722
KURTOSIS	6.556	SKEWNESS	2.814	RANGE	5.000
MINIMUM	0.0	MAXIMUM	5.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

HQSEC HEADQUARTERS SECTION HEAD OR ABOVE

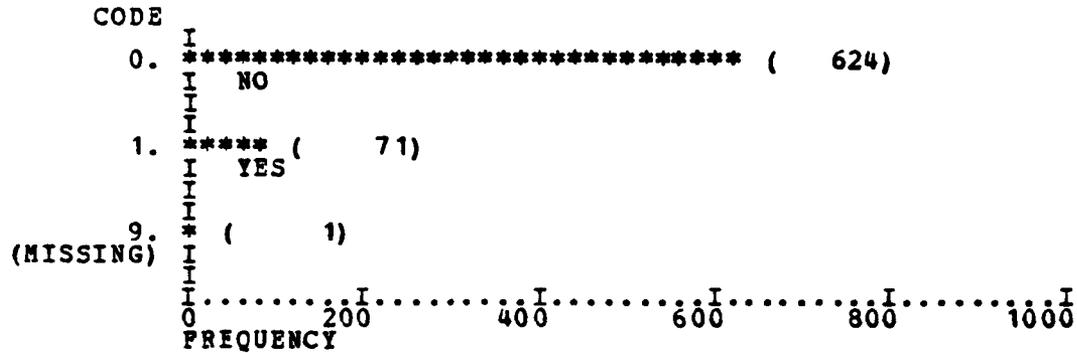


MEAN	0.128	STD ERR	0.013	MEDIAN	0.074
MODE	0.0	STD DEV	0.335	VARIANCE	0.112
KURTOSIS	2.975	SKEWNESS	2.229	RANGE	1.000
MINIMUM	0.0	MAXIMUM	1.000		
VALID CASES	694	MISSING CASES	2		

11/13/81

FILE - THESIS - CREATED 09/30/81

MOBILE MOBILE INSTRUCTOR PILOT



MEAN	0.102	STD ERR	0.011	MEDIAN	0.057
MODE	0.0	STD DEV	0.303	VARIANCE	0.092
KURTOSIS	4.947	SKENNESS	2.633	RANGE	1.000
MINIMUM	0.0	MAXIMUM	1.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

ARSC A.R.S.C. PILOT

```

CODE
0. ***** ( 658)
   I
   I NO
   I
1. *** ( 37)
   I
   I YES
   I
9. * ( 1)
(MISSING) I
          I
          I
          I.....I.....I.....I.....I
          0          200          400          600          800          1000
          FREQUENCY

```

MEAN	0.053	STD ERR	0.009	MEDIAN	0.028
MODE	0.0	STD DEV	0.225	VARIANCE	0.050
KURTOSIS	13.949	SKEWNESS	3.989	RANGE	1.000
MINIMUM	0.0	MAXIMUM	1.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

MARITAL MARITAL STATUS

CODE	FREQUENCY
0. ***** (608) MARRIED	608
1. ***** (87) SINGLE	87
9. (MISSING) * (1)	1

MEAN	0.125	STD ERR	0.013	MEDIAN	0.072
MODE	0.0	STD DEV	0.331	VARIANCE	0.110
KURTOSIS	3.163	SKEWNESS	2.270	RANGE	1.000
MINIMUM	0.0	MAXIMUM	1.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

CURRENT CIVIL RATINGS CURRENT?

CODE	FREQUENCY
0. ***** (140) YES	140
1. ***** (555) NO	555
9. (MISSING) (1)	1

MEAN	0.799	STD ERR	0.015	MEDIAN	0.874
MODE	1.000	STD DEV	0.401	VARIANCE	0.161
KURTOSIS	0.227	SKEWNESS	-1.492	RANGE	1.000
MINIMUM	0.0	MAXIMUM	1.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

JOBS NUMBER OF JOBS OUTSIDE OF COAST GUARD

CODE	DESCRIPTION	COUNT
0.	NONE	430
1.	ONE	113
2.	TWO	86
3.	THREE OR MORE	66
9.	(MISSING)	1

FREQUENCY

MEAN	0.695	STD ERR	0.039	MEDIAN	0.308
MODE	0.0	STD DEV	1.015	VARIANCE	1.031
KURTOSIS	0.016	SKEWNESS	1.185	RANGE	3.000
MINIMUM	0.0	MAXIMUM	3.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

SERVEK BREAKS IN SERVICE

CODE	FREQUENCY
0. ***** (148) YES	
1. ***** (547) NO	
9. (1) (MISSING)	
	0 200 400 600 800 1000

MEAN	0.787	STD ERR	0.016	MEDIAN	0.865
MODE	1.000	STD DEV	0.410	VARIANCE	0.168
KURTOSIS	-0.025	SKEWNESS	-1.405	RANGE	1.000
MINIMUM	0.0	MAXIMUM	1.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

MOTIV REASON FOR JOINING COAST GUARD

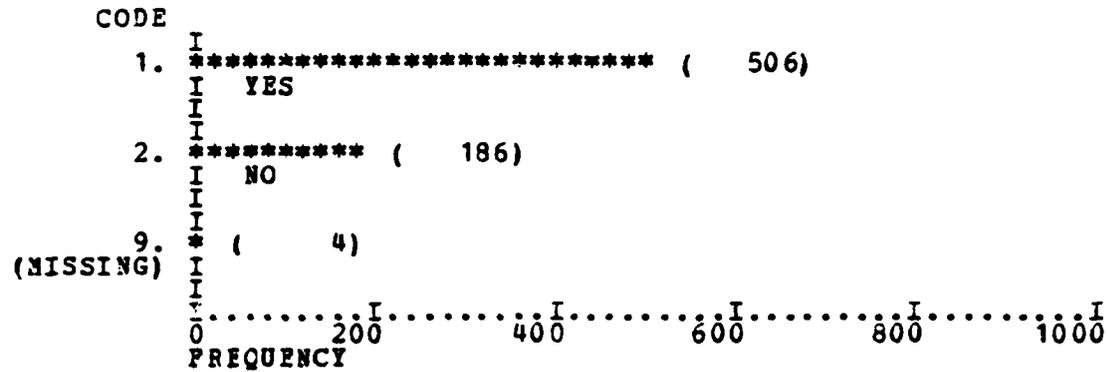
CODE	REASON FOR JOINING COAST GUARD	FREQUENCY
1.	** (13) TRAVEL OPPORTUNITIES	13
2.	**** (29) RELATIVE IN SERVICE	29
3.	***** (242) SEARCH AND RESCUE	242
4.	***** (84) ALTERNATIVE TO DRAFT	84
5.	***** (150) OTHER REASON	150
6.	***** (100) EDUCATION-CGA	100
9.	***** (72) MULTIPLE REASONS	72
8.	** (6) (MISSING)	6

MEAN	4.538	STD ERR	0.074	MEDIAN	4.226
MODE	3.000	STD DEV	1.952	VARIANCE	3.811
KURTOSIS	0.376	SKEWNESS	0.936	RANGE	8.000
MINIMUM	1.000	MAXIMUM	9.000		
VALID CASES	690	MISSING CASES	6		

11/13/81

FILE - THESIS - CREATED 09/30/81

SURV02 ENTER INTENDING TO BE A PILOT?



MEAN	1.269	STD ERR	0.017	MEDIAN	1.184
MODE	1.000	STD DEV	0.444	VARIANCE	0.197
KURTOSIS	-0.910	SKEWNESS	1.045	RANGE	1.000
MINIMUM	1.000	MAXIMUM	2.000		
VALID CASES	692	MISSING CASES	4		

11/13/81

FILE - THESIS - CREATED 09/30/81

SURV03 INTENTIONS TO STAY AT LEAST 20YR

```

CODE
1. *** ( 20)
   I WILL SURELY RESIGN
   I
   I
2. *** ( 18)
   I PROBABLY RESIGN
   I
   I
3. ***** ( 61)
   I UNDECIDED
   I
   I
4. ***** ( 198)
   I PROBABLY STAY IN
   I
   I
5. ***** ( 391)
   I SURELY STAY IN
   I
   I
9. ** ( 8)
(MISSING) I
          I
          I.....I.....I.....I.....I.....I
          0          100          200          300          400          500
          FREQUENCY
    
```

MEAN	4.340	STD ERR	0.036	MEDIAN	4.620
MODE	5.000	STD DEV	0.953	VARIANCE	0.909
KURTOSIS	2.857	SKEWNESS	-1.715	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	688	MISSING CASES	8		

11/13/81

FILE - THESIS - CREATED 09/30/81

SURV05 DISLIKE IDEA OF NON-PLY STAFF JOB

CODE

```

1. ***** ( 210)
   I
   I AGREE STRONGLY
   I
2. ***** ( 132)
   I
   I
   I
3. ***** ( 114)
   I
   I
   I
4. ***** ( 124)
   I
   I
   I
5. ***** ( 110)
   I DISAGREE STRONGLY
   I
9. ** ( 6)
(MISSING) I
          I
          I
          I.....I.....I.....I.....I
          0.....100.....200.....300.....400.....500
          FREQUENCY

```

MEAN	2.699	STD ERR	0.056	MEDIAN	2.526
MODE	1.000	STD DEV	1.462	VARIANCE	2.138
KURTOSIS	-1.341	SKEWNESS	0.253	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	690	MISSING CASES	6		

11/13/81

FILE - THESIS - CREATED 09/30/81

SURV07 WOULD ENJOY BEING ADMIN OFFICER

CODE	DESCRIPTION	COUNT
1.	DISAGREE STRONGLY	172
2.		131
3.		153
4.		140
5.	AGREE STRONGLY	92
9.	(MISSING)	8

0	40	80	120	160	200
FREQUENCY					

MEAN	2.781	STD ERR	0.052	MEDIAN	2.768
MODE	1.000	STD DEV	1.372	VARIANCE	1.883
KURTOSIS	-1.225	SKEWNESS	0.129	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	688	MISSING CASES	8		

11/13/81

FILE - THESIS - CREATED 09/30/81

SURV09 WOULD BE___IN OTHER CG BRANCH

CODE

1. ***** (221)

VERY UNHAPPY

2. ***** (193)

3. ***** (122)

4. ***** (97)

5. ***** (63)
JUST AS HAPPY

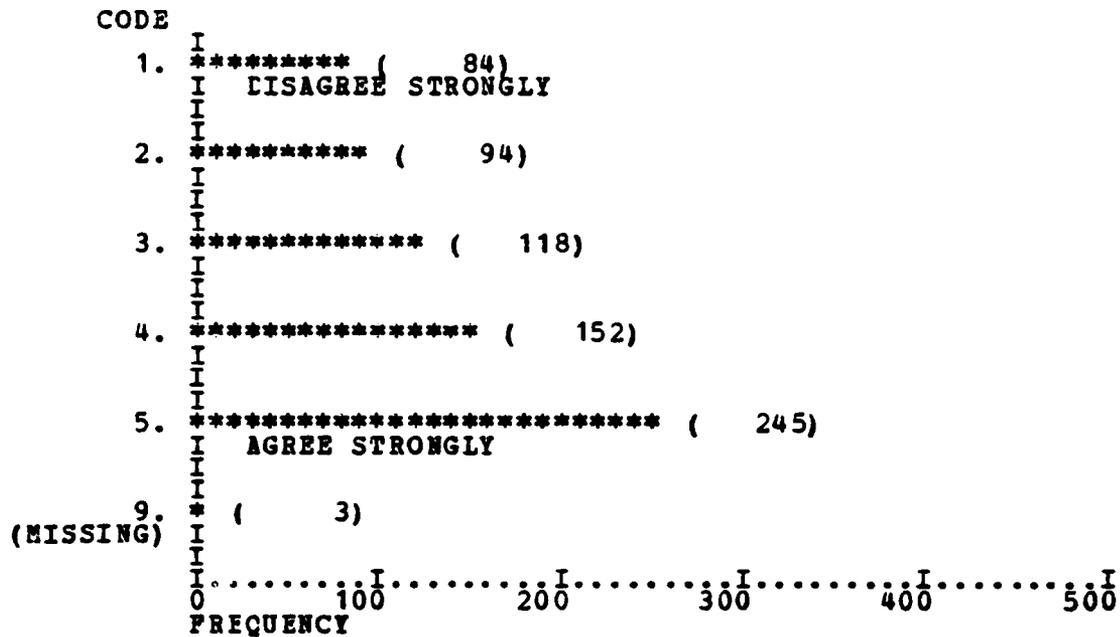


MEAN	2.408	STD ERR	0.049	MEDIAN	2.158
MODE	1.000	STD DEV	1.304	VARIANCE	1.701
KURTOSIS	-0.828	SKEWNESS	0.575	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	696	MISSING CASES	0		

11/13/81

FILE - THESIS - CREATED 09/30/81

SURV10 WOULD ENJOY BEING XO



MEAN	3.548	STD ERR	0.053	MEDIAN	3.832
MODE	5.000	STD DEV	1.399	VARIANCE	1.956
KURTOSIS	-1.037	SKEWNESS	-0.527	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	693	MISSING CASES	3		

11/13/81

FILE - THESIS - CREATED 09/30/81

SURV11 IF JUST WANT TO FLY DONT PUT AS MUCH EFFORT INTO
COLLATERAL DUTIES AS OTHERS DO

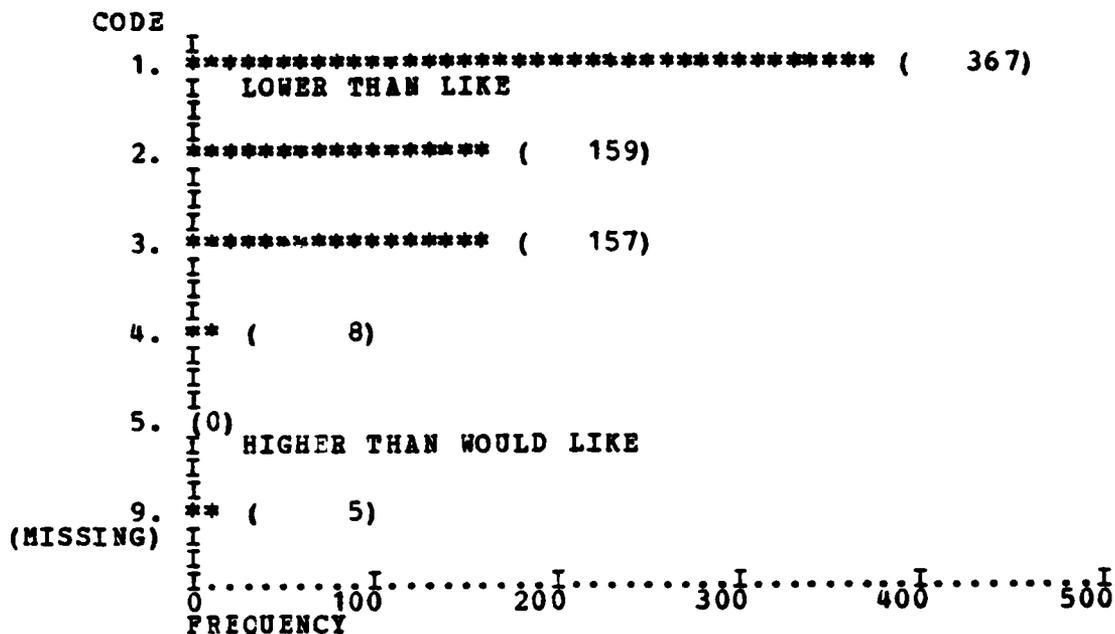
CODE	DESCRIPTION	FREQUENCY
1.	DISAGREE STRONGLY	121
2.		103
3.		90
4.		194
5.	AGREE STRONGLY	187
9.	(MISSING)	1

MEAN	3.321	STD ERR	0.055	MEDIAN	3.673
MODE	4.000	STD DEV	1.449	VARIANCE	2.100
KURTOSIS	-1.249	SKEWNESS	-0.383	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	695	MISSING CASES	1		

11/13/81

FILE - THESIS - CREATED 09/30/81

SURV12 AVG MONTHLY FLT TIME__THAN LIKE



MEAN	1.719	STD ERR	0.032	MEDIAN	1.441
MODE	1.000	STD DEV	0.853	VARIANCE	0.727
KURTOSIS	-0.971	SKEWNESS	0.684	RANGE	3.000
MINIMUM	1.000	MAXIMUM	4.000		
VALID CASES	691	MISSING CASES	5		

1/13/81

FILE - THESIS - CREATED 09/30/81

SURV15 WOULD FOREGO CDR TO FLY 20

```

CODE
1. ***** ( 86)
   I AGREE STRONGLY
   I
   I
2. ***** ( 83)
   I
   I
   I
3. ***** ( 69)
   I
   I
   I
4. ***** ( 113)
   I
   I
   I
5. ***** ( 340)
   I DISAGREE STRONGLY
   I
   I
9. * ( 5)
MISSING) I
        I
        I
        I.....I.....I.....I.....I.....I
        0.....100.....200.....300.....400.....500
        FREQUENCY

```

MEAN	3.779	STD ERR	0.056	MEDIAN	4.451
MODE	5.000	STD DEV	1.465	VARIANCE	2.147
CURTOSIS	-0.875	SKEWNESS	-0.797	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	691	MISSING CASES	5		

1/13/81

FILE - THESIS - CREATED 09/30/81

:URV16 BEST TOUR LENGTH IS _____

```

CODE
1. ***** ( 68)
   I
   I 6 YEARS OR MORE
   I
   I
2. ***** ( 133)
   I
   I 5 YEARS
   I
   I
3. ***** ( 380)
   I
   I FOUR YEARS
   I
   I
4. ***** ( 108)
   I
   I THREE YEARS
   I
   I
5. ** ( 5)
   I
   I TWO YEARS OR LESS
   I
   I
9. * ( 2)
(MISSING) I
          I
          I
          I.....I.....I.....I.....I
          0.....100.....200.....300.....400.....500
          FREQUENCY

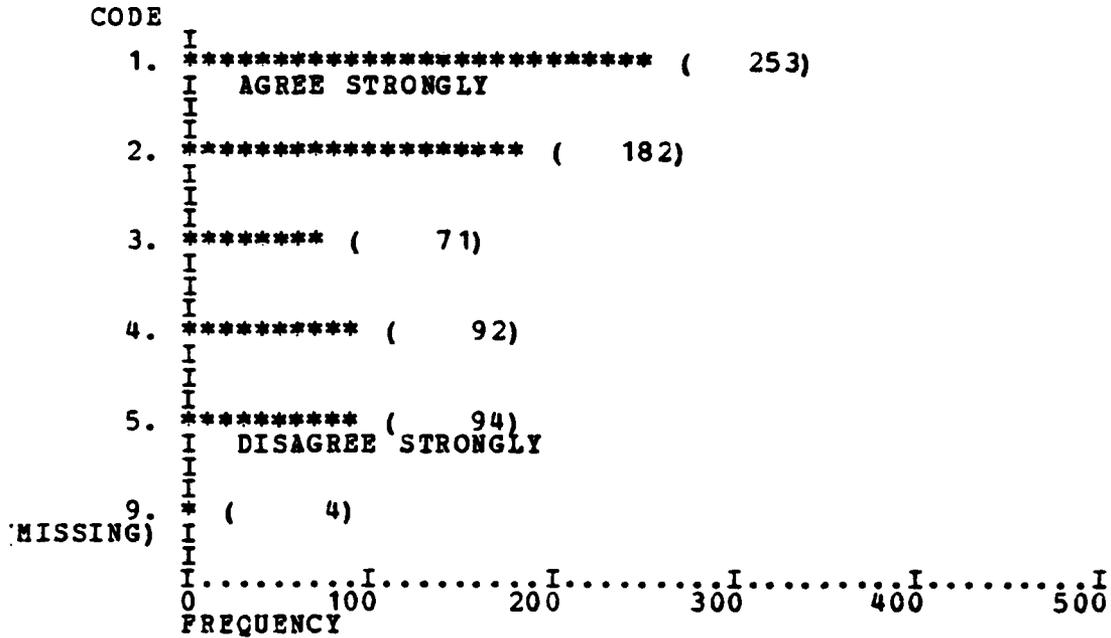
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MEAN	2.782	STD ERR	0.032	MEDIAN	2.884
MODE	3.000	STD DEV	0.850	VARIANCE	0.722
KURTOSIS	0.048	SKEWNESS	-0.461	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	694	MISSING CASES	2		

1/13/81

FILE - THESIS - CREATED 09/30/81

URV17 SHOULD DEVELOP INSTRUCTOR PILOT QUALS

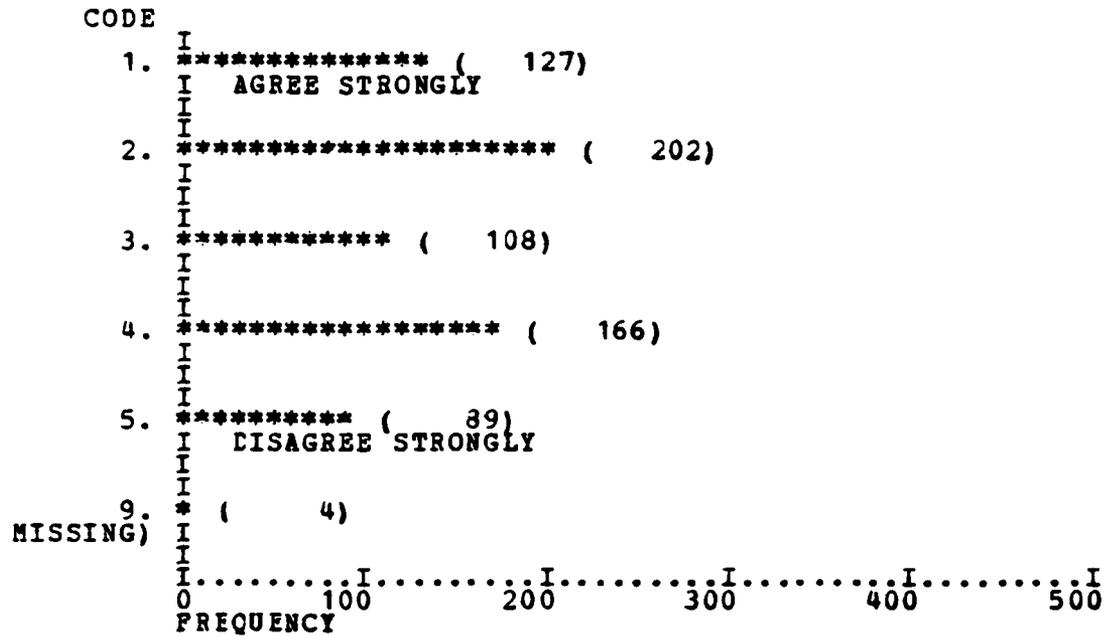


MEAN	2.410	STD ERR	0.055	MEDIAN	2.011
MODE	1.000	STD DEV	1.434	VARIANCE	2.057
CURTOSIS	-1.002	SKEWNESS	0.637	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	692	MISSING CASES	4		

1/13/81

FILE - THESIS - CREATED 09/30/81

URV18 PILOTS SHOULD FLY OTHERS SHD ADMIN



MEAN	2.838	STD ERR	0.050	MEDIAN	2.657
MODE	2.000	STD DEV	1.325	VARIANCE	1.757
CURTOSIS	-1.217	SKEWNESS	0.157	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	692	MISSING CASES	4		

1/13/81

FILE - THESIS - CREATED 09/30/81

URV19 PRIMARILY IN CG TO FLY CG ACFT

CODE

- 1. I ***** (174)
I AGREE STRONGLY
I
- 2. I ***** (156)
I
- 3. I ***** (150)
I
- 4. I ***** (128)
I
- 5. I ***** (87)
I DISAGREE STRONGLY
I
- 9. I * (1)
I

MISSING)



MEAN	2.709	STD ERR	0.051	MEDIAN	2.617
MODE	1.000	STD DEV	1.352	VARIANCE	1.829
CURTOSIS	-1.155	SKEWNESS	0.234	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	695	MISSING CASES	1		

1/13/81

FILE - THESIS - CREATED 09/30/81

SURV20 WOULD XFER OUT TO FLY

```

CODE
 1. ***** ( 95)
    I AGREE STRONGLY
    I
    I
 2. ***** ( 76)
    I
    I
    I
 3. ***** ( 70)
    I
    I
    I
 4. ***** ( 116)
    I
    I
    I
 5. ***** ( 336)
    I DISAGREE STRONGLY
    I
    I
 9. * ( 3)
(MISSING) I
    I
    I
    I.....I.....I.....I.....I
    0.....100.....200.....300.....400.....500
    FREQUENCY

```

MEAN	3.753	STD ERR	0.056	MEDIAN	4.409
MODE	5.000	STD DEV	1.483	VARIANCE	2.201
CURTOSIS	-0.902	SKEWNESS	-0.786	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	693	MISSING CASES	3		

1/13/81

FILE - THESIS - CREATED 09/30/81

URV21 IMPORT OF BEING XO OR CO

```

CODE
 1. ***** ( 121)
    I
    I  VERY UNIMPORTANT
    I
 2. ***** ( 73)
    I
    I
 3. ***** ( 119)
    I
    I
 4. ***** ( 162)
    I
    I
 5. ***** ( 220)
    I  VERY IMPORTANT
    I
 9. * ( 1)
(MISSING) I
    I
    I.....I.....I.....I.....I.....I
    0.....100.....200.....300.....400.....500
    FREQUENCY

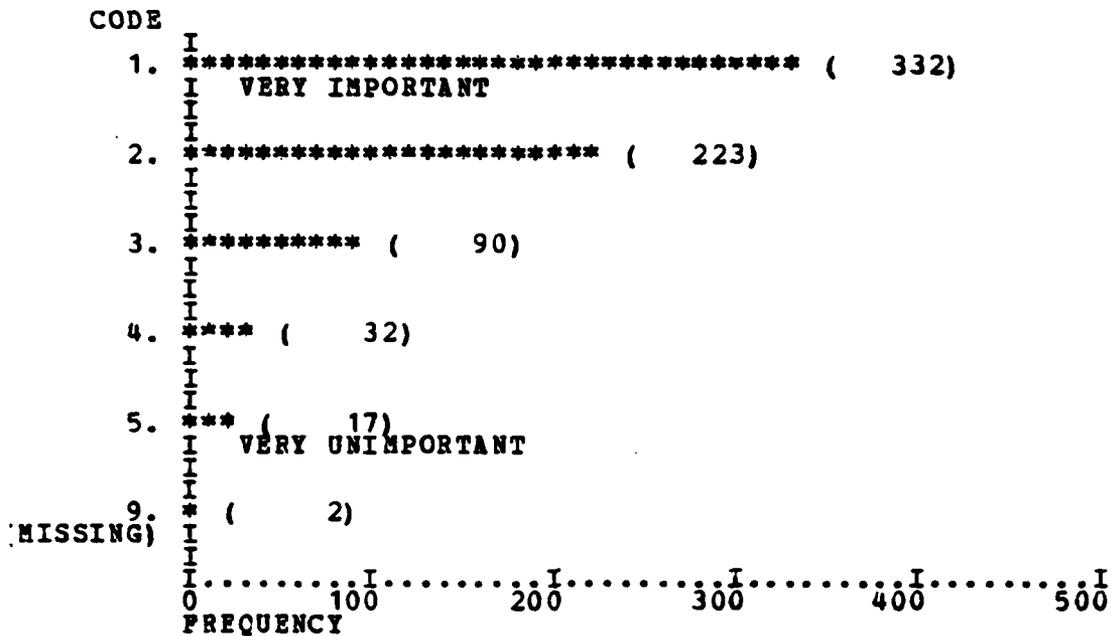
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MEAN	3.413	STD ERR	0.055	MEDIAN	3.713
MODE	5.000	STD DEV	1.461	VARIANCE	2.133
CURTOSIS	-1.157	SKEWNESS	-0.465	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	695	MISSING CASES	1		

1/13/81

FILE - THESIS - CREATED 09/30/81

IMPORTANCE OF FLYING CG ACFT

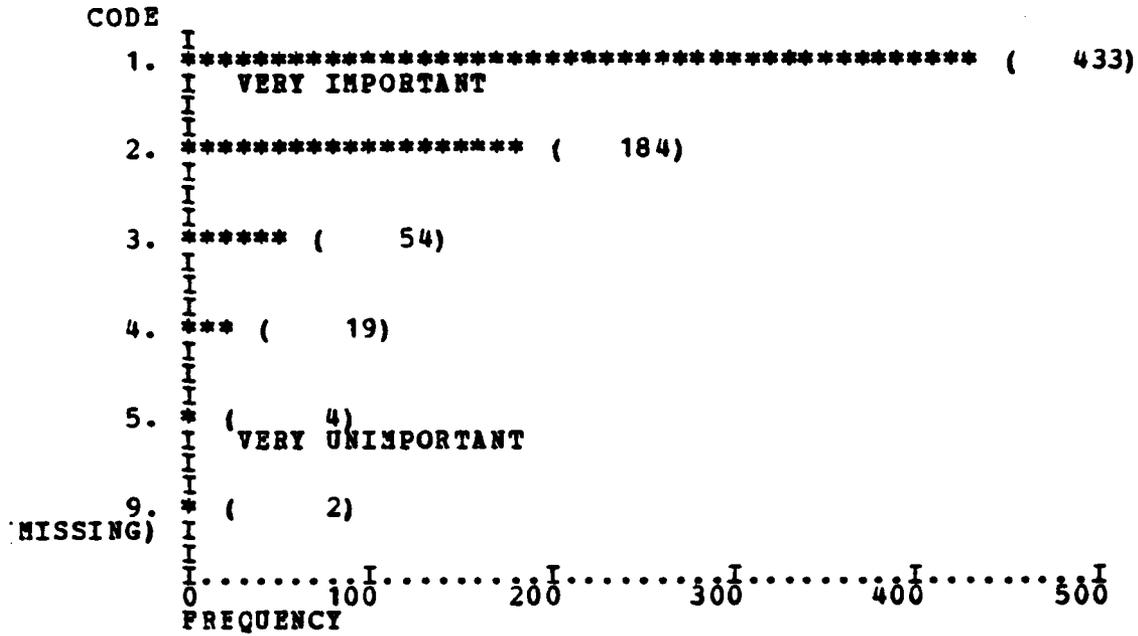


MEAN	1.817	STD ERR	0.038	MEDIAN	1.567
MODE	1.000	STD DEV	0.990	VARIANCE	0.981
KURTOSIS	1.217	SKEWNESS	1.267	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	694	MISSING CASES	2		

1/13/81

FILE - THESIS - CREATED 09/30/81

SURV24 IMPORT OF BECOMING UNUSUALLY GOOD PILOT



MEAN	1.526	STD ERR	0.030	MEDIAN	1.301
MODE	1.000	STD DEV	0.800	VARIANCE	0.639
KURTOSIS	2.656	SKEWNESS	1.656	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	694	MISSING CASES	2		

1/13/81

FILE - THESIS - CREATED 09/30/81

URV27 IMPCRT OF SERV ON HIGH RESE STAFF

```

CODE
1. ***** ( 150)
   I  VERY UNIMPORTANT
   I
   I
2. ***** ( 121)
   I
   I
3. ***** ( 164)
   I
   I
4. ***** ( 158)
   I
   I
5. ***** ( 100)
   I  VERY IMPORTANT
   I
9. ** ( 3)
MISSING) I
         I
         I.....I.....I.....I.....I.....I
         0          40          80          120          160          200
         FREQUENCY

```

EAN	2.909	STD ERR	0.052	MEDIAN	2.960
ODE	3.000	STD DEV	1.356	VARIANCE	1.840
URTOSIS	-1.200	SKEWNESS	-0.009	RANGE	4.000
INIMUM	1.000	MAXIMUM	5.000		
ALID CASES	693	MISSING CASES	3		

1/13/81

FILE - THESIS - CREATED 09/30/81

URV28 CAREER OF PILOT OR OFFICER

CODE

- 1. ***** (92)
I MOSTLY AS A PILOT
I
I
- 2. ***** (151)
I
I
- 3. ***** (176)
I
I
- 4. ***** (147)
I
I
- 5. ***** (127)
I MOSTLY AS AN OFFICER
I

9. ** (3)
MISSING)



EAN	3.095	STD ERR	0.049	MEDIAN	3.088
ODE	3.000	STD DEV	1.299	VARIANCE	1.687
URTOSIS	-1.088	SKEWNESS	-0.038	RANGE	4.000
INIMUM	1.000	MAXIMUM	5.000		
VALID CASES	693	MISSING CASES	3		

1/13/81

FILE - THESIS - CREATED 09/30/81

URV30 _____PARTIC IN FLY ONLY CAREER PRGM

```

CODE
1. ***** ( 292)
   I
   I  WOULD
   I
2. ***** ( 134)
   I
   I
   I
3. ***** ( 113)
   I
   I
   I
4. ***** ( 55)
   I
   I
   I
5. ***** ( 100)
   I  WOULD NOT
   I
   I
9. * ( 2)
MISSING)
   I
   I
   I.....I.....I.....I.....I.....I
0          100          200          300          400          500
FREQUENCY

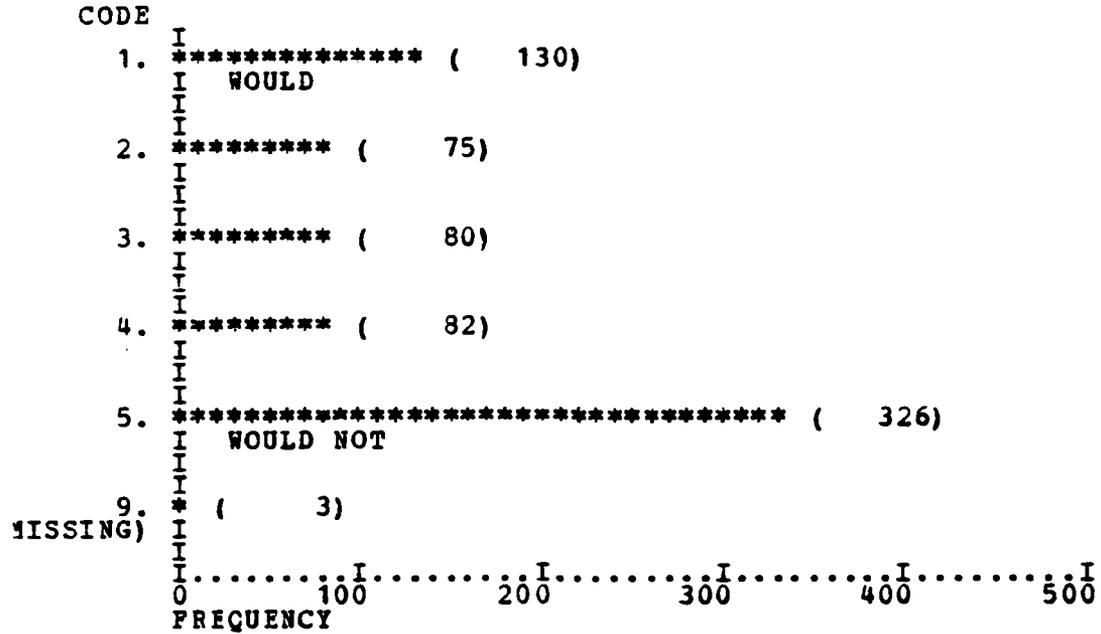
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EAN	2.333	STD ERR	0.055	MEDIAN	1.910
JDE	1.000	STD DEV	1.446	VARIANCE	2.090
URTOSIS	-0.869	SKEWNESS	0.714	RANGE	4.000
INIMUM	1.000	MAXIMUM	5.000		
ALID CASES	694	MISSING CASES	2		

1/13/81

FILE - THESIS - CREATED 09/30/81

URV31 _____PARTIC IN FLY ONLY CAREER PRGM IF LIMITED TO LCDR

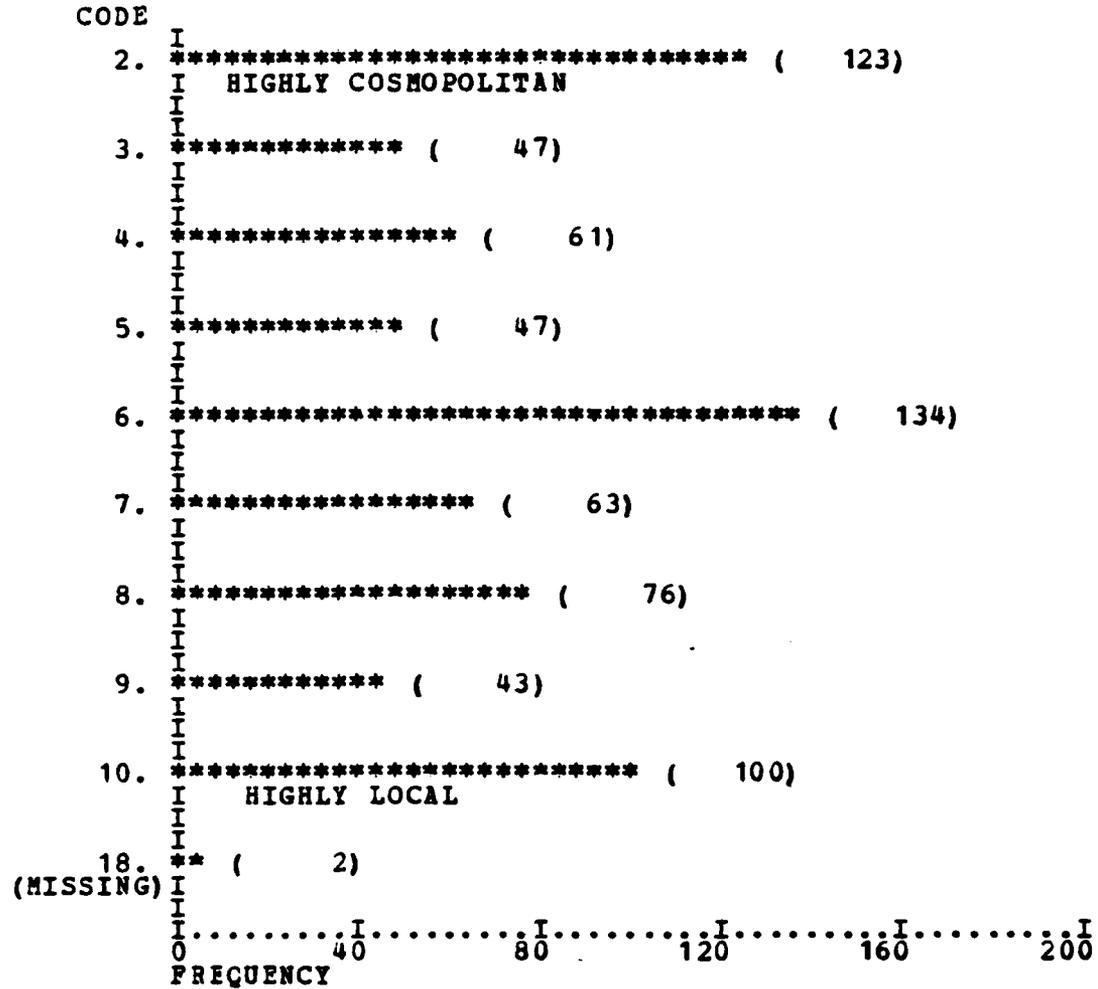


MEAN	3.576	STD ERR	0.060	MEDIAN	4.250
MODE	5.000	STD DEV	1.591	VARIANCE	2.531
JRTOSIS	-1.298	SKEWNESS	-0.570	RANGE	4.000
MINIMUM	1.000	MAXIMUM	5.000		
VALID CASES	693	MISSING CASES	3		

1/13/81

FILE - THESIS - CREATED 09/30/81

JMB



PAN	5.951	STD ERR	0.105	MEDIAN	6.022
JDE	6.000	STD DEV	2.767	VARIANCE	7.658
URTOSIS	-0.325	SKEWNESS	0.190	RANGE	16.000
INIMUM	2.000	MAXIMUM	18.000		
ALID CASES	696	MISSING CASES	0		

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