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**PROFESSIONAL DEVELOPMENT OF
OFFICERS SPECIALIZING IN THE
SCIENTIFIC UTILIZATION AREA**

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Submitted To:

**Lieutenant Colonel Albert A. Robbert, III
Headquarters, USAF/DPXA
The Pentagon, Room 5C360
Washington, D.C. 20330-5060**

Submitted By:

**Syllogistics, Inc.
5514 Alma Lane, Suite 400
Springfield, Virginia 22151**

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
	PREFACE.....	<i>ii</i>
	GLOSSARY OF TERMS	<i>iii</i>
	INTRODUCTION.....	1
	BACKGROUND	1
	Personnel Research and Analysis Offices.....	2
	Key Positions.....	2
	Description of 26XX Inventory.....	4
	Dilemmas.....	5
	APPROACH.....	10
	RESULTS.....	10
	SUMMARY AND OBSERVATIONS.....	19
	Key Leadership Positions.....	19
	Staffing Planning.....	20
	BIBLIOGRAPHY	21

LIST OF TABLES

<u>TABLE</u>	<u>TITLE</u>	<u>PAGE</u>
1	CAREER FIELDS OF PERSONNEL ANALYSIS LEADERS.....	3
2	FY87 INVENTORY OF 26XX OFFICERS	4
3	COLONELS WHO HAVE SERVED IN PERSONNEL RESEARCH AND ANALYSIS IN LAST DECADE	6

GLOSSARY OF TERMS

AFA	Air Force Academy
AFHRL	Air Force Human Resources Laboratory
AFMPC or MPC	Air Force Military Personnel Center
ATC	Air Training Command
C73XX	Personnel Officer with a computer sub-specialty
DMDC	Defense Manpower Data Center
DP	Deputy Chief of Staff for Personnel
DPMD	Personnel Data Systems Directorate, AFMPC
DPMROM	Rated Officers Management and Analysis Office located in the MPC
DPMT	Plans, Programs and Analysis Directorate, Air Force Military Personnel Center
DPMYA	Analysis Division, DPMY
DPMYO	Personnel Measurement Division, DPMY
DPX	Personnel Plans
DPXA	Analysis Division, Personnel Plans Directorate, Headquarters, United States Air Force
DPXE	Entitlements Division, Personnel Plans Directorate, Headquarters, United States Air Force
DPXOA	Accessions Policy Branch, Policy Division, Personnel Plans Directorate, Headquarters, United States Air Force
DPXX	Plans Division, Personnel Plans Directorate, Headquarters, United States Air Force
DPZ	Special study group set up by the DP
HQ	Headquarters
ID	Training Division, Air Force Human Resources Laboratory
MAC	Military Airlift Command
MO	Manpower and Personnel Division, Air Force Human Resources Laboratory
OER	Officer Effectiveness Report

OMC	Occupational Measurement Center
OPD	Officer Professional Development program
OSD	Office of the Secretary of Defense
RS	Recruiting Service
SQ	Squadron
TAC	Tactical Air Command
TPDC	Defense Training and Performance Data Center
TT	Technical Training
USAFE	United States Air Force Europe Command

INTRODUCTION

This effort was requested by the Analysis Division of the Directorate of Personnel Plans, Headquarters, United States Air Force, to help them in their planning for future manning of the various research and analysis offices serving the personnel community in some way or another. As the study unfolded, it became clear that there were many competing interests and dilemmas facing not only the personnel functional managers but also individuals (both 26XX scientific officers and 73XX personnel officers) within the personnel community.

The objective of the effort was to provide the personnel community with insights related to: (1) ensuring there is a sufficient pool of qualified officers to fill the leadership billets in the personnel research and analysis offices; and (2) giving proper guidance to young 26XX officers serving in the personnel arena.

The paper is organized into a background section which describes the key offices and positions and dilemmas, an approach section which discusses the basic approach of using a survey of experts to get their views on the key issues, a results section, and a summary and observations section.

BACKGROUND

This section includes a description of the personnel research and analysis offices and key billets along with a condensed history of some of the officers who have held the key billets over the last two decades. It also includes a descriptive analysis of the 26XX inventory as of the end of FY87 that sets the scope of their involvement within the personnel community. Finally, this section discusses the dilemmas facing the community

and the individuals within it. These dilemmas are further delineated into issues that formed the basis for an issue paper that was sent to selected officers for comment.

PERSONNEL RESEARCH AND ANALYSIS OFFICES

The principal research and analysis offices serving the personnel community are the Analysis Division (DPXA) of the Directorate of Personnel Plans, HQ USAF; the Plans, Programs and Analysis Directorate (DPMY) of the Air Force Military Personnel Center (AFMPC); and the Air Force Human Resources Laboratory (AFHRL). Additionally, several major commands have developed personnel analysis capabilities which are primarily headed by a lieutenant colonel or lower. At the working level, these offices are primarily manned by 26XX officers. The 26XX officers who serve in these offices are 267X behavioral scientists, 268X scientific analysts (formerly operations research officers) and their field grade counterpart, the 261X scientific manager. The offices perform a wide range of personnel related studies and research and must interact with experts from a variety of agencies -- from Congress and the Office of Management and Budget to the Defense Advisory Committee (on the Armed Services Vocational Aptitude Battery). Their efforts are used to devise new personnel policies, evaluate pending legislation, forecast personnel events to assist force programmers, and solve field level problems related to personnel programs.

KEY POSITIONS

To provide the full background for the professional development of 26XX officers in the personnel arena, it is necessary to look at several of the key leadership positions in the research and analysis offices mentioned earlier. The Analysis Division chief; the Plans, Programs and Analysis director and deputy director; and two of the Air Force Human Resources Laboratory division chiefs are colonel billets that have at times been filled with 26XX officers. This discussion will focus on the Analysis Division

chief and the Plans, Programs and Analysis director. These positions have typically been filled by personnel from the 73XX personnel career field and 26XX scientific manager career field. For example, as seen in Table 1, of the last nine Analysis Division chiefs, six were personnel officers, two were analysts, and one was primarily a pilot. Likewise, of the ten Plans, Programs and Analysis directors, three were personnel officers, four were primarily pilots, and three were analysts. Note, at least one of the Plans, Programs and Analysis colonels has also had rated experience.

The requirements for the leadership positions within the analysis community include knowledge of personnel as well as experience in or with analysis. These individuals serve as translators for the analysts and the personnel functional experts.

The makeup and history of these positions is a part of the entire scenario that must be considered when developing personnel staffing plans for the personnel research and analysis offices. As history has shown, these key positions are not always filled by officers from the 26XX career field. The apparent reduced opportunity to successfully compete for these jobs may be discouraging for young 26XX officers aspiring to progress in the personnel research and analysis arena. This in turn could influence retention patterns and assignment patterns of 26XX officers.

TABLE 1

CAREER FIELDS OF PERSONNEL ANALYSIS LEADERS

<u>ANALYSIS DIVISION CHIEFS</u>		<u>PLANS, PROGRAMS AND ANALYSIS DIRECTORS</u>	
<u>Name</u>	<u>Career Field</u>	<u>Name</u>	<u>Career Field</u>
Pangle	73	Serangeli	73
Elder	73	Miller	73
Valentine	73	Harpe	pilot
Walters	26	Walters	26
Wilson	26	Patton	73
Forbes	73	McNeil	pilot
Fee	73	Figgins	pilot
Casey	pilot	Clark	26
Robbert	73	Handel	pilot
		Klaurens	26

DESCRIPTION OF 26XX INVENTORY

The inventory as of the end of FY87 was used to illuminate the general makeup of the 26XX career field. These data are considered representative of the current situation and are summarized in Table 2, by grade. At the company grade level, there were 201 behavioral scientists (267X) in the force, all of which can be considered as part of the pool of 26XX officers that could support the personnel community. There were 616 scientific analysts (268X). Most of these could enter the personnel analysis community (at least the company grade officers and junior majors) because their technical skills (statistics, probability, computer modeling) are, for the most part, readily transferable. These company grade officers along with 575 other officers from such diverse scientific specialities as nuclear physics, chemistry, and computer science all feed into the field grade specialty scientific manager (261X).

TABLE 2
FY87 INVENTORY OF 26XX OFFICERS

<u>GRADE</u>	<u>BEHAVIORAL SCIENTIST (267X)</u>	<u>SCIENTIFIC ANALYST (268X)</u>	<u>SCIENTIFIC MANAGERS (261X)</u>	<u>SCIENTIFIC MANAGERS ASSOCIATED WITH PERSONNEL</u>
Lieutenant	71	166	1	-
Captain	87	309	27	-
Major	32	97	121	14
Lieutenant Colonel	11	42	127	25
Colonel	<u> </u>	<u> </u>	<u> </u>	<u> </u>
Total	201	616	311	43

There were 311 scientific managers of which roughly 43 (14 percent) could be associated with personnel. These forty-three were located as follows: six at Air Force Military Personnel Center (five in the Plans, Programs and Analysis Directorate), seven in Analysis Division, three in the Office of Secretary of Defense, and nineteen in Air Force Systems Command (two at Andrews AFB, four at Wright-Patterson AFB, and thirteen at Brooks AFB).

This 26XX career field is quite specialized and many of the positions require advanced specialized education. The mathematical and scientific techniques typically used by the 268X and 267X are not generally understood by most of the Air Force. To this end, a new specialty has been created that is related to the 26XX field as it is used in the personnel community. That is the Y73XX specialty. These personnel, which have a masters degree in manpower-personnel-training analysis from the Navy Post Graduate School, are to be used as translators between the analysts and the personnel functional experts. The concept is to take personnel officers and give them basic training in how to use analysis so that they can perform this translation function.

DILEMMAS

A review was conducted of abbreviated career histories of officers who have been in the personnel research and analysis activities within the last decade and who successfully competed for colonel. This review was conducted to see if there were any assignment or education patterns that might provide historical insights that would be useful in developing career guidance for the young 26XX officers. As shown by the wide variety of assignment patterns in Table 3, there is no established track.

Based on many conversations with officers in the personnel research and analysis arena and this review of career histories, an assessment of the 26XX career field was made. The assessment was made relative to current thinking within the Air Force articulated in the Officer Professional Development (OPD) program. The following discussion delineates some of the major dilemmas facing the personnel research and analysis community.

TABLE 3

COLONELS WHO HAVE SERVED IN PERSONNEL
RESEARCH AND ANALYSIS IN LAST DECADE

<u>NAME</u>	<u>SPECIALTY</u>	<u>EDUCATION</u>	<u>PRINCIPAL ASSIGNMENTS</u>
Amor	26XX	PhD	26XX, DPMYA, AFHRL (chief MO, vice commander), Drug Testing Laboratory Commander, AF Weapons Laboratory Commander
Berry	267X	PhD	Radar site commander, AFHRL (deputy MO), HQ Systems Command, AFHRL (chief ID)
Birdlebough	267X	MS	HQ squadron commander, HQ ATC, DPP, recruiting squadron commander, recruiting group deputy commander, OSD
Casey	pilot	MS	Flying, AF/Studies and Analysis, DPMRO, vice wing commander, DPXA (chief)
Curran	267X	PhD	DPMYO, OMC, DPZ, DPMDW, OSD, TPDC
Clark	268X	MS	DPMYA, AF/Chief of Staff Group, DPMY (director), ATC/DP, base commander
Elder	73XX	MS	73XX, DPMD, DPXA (chief), DP and ATC executive officer, base commander, DPX (deputy)
Fee	73XX	MS	73XX, AF/Studies and Analysis, base commander DPXA (chief), OSD
Forbes	73XX	MS	73XX, DPXA (chief), SAC/DPX, AF Personnel Council
Gaffney	268X	PhD	Manpower, AFA, DPXA (branch chief), DPXE (chief)
Handel	pilot	MS	Flying, DPMRO, flying, maintenance squadron commander, flying squadron commander, DPMY (director)
Hoskins	268X	PhD	AFHRL, DPXA, OSD, research fellow, DPXA (deputy)
Kerchner	268X	MS	Systems Command, DPMD, DPXA (branch chief) OSD, Systems Command, AFHRL (chief MO) DPMY (deputy)
Klaurens	268X	MS	Fighter Weapons School, DPMYA, DMDC (Monterey), TAC personnel analysis, DPMY (deputy) OER study group, DPMY (director)
Leighton	268X	MS	DPMD, DPXA, DPXX, ATC/TT, ATC squadron commander, AFHRL (chief MO)
Patterson	73XX	MS	Fuels/supply/maintenance, aide, DPXOA, executive officer to ATC/RS, recruit squadron commander, OSD, research fellow, Womens Study Group, USAFE/Assist DP
Roehrkasse	268X	PhD	AFA, DPXA (branch chief), research fellow, MAC Analysis Group (chief)

TABLE 3 (Continued)

COLONELS WHO HAVE SERVED IN PERSONNEL
RESEARCH AND ANALYSIS IN LAST DECADE

<u>NAME</u>	<u>SPECIALTY</u>	<u>EDUCATION</u>	<u>PRINCIPAL ASSIGNMENTS</u>
Robbert	73XX	MS	73XX, ATC instructor, ^{DPMR} DPXX, DPXA (chief), DPXX, DPXA (chief)
Van Duyn	268X	MS	HQ squadron commander, DPMYA, OSD, DPXA (branch chief), OSD, base commander, ATC/DP
Walters	268X	PhD	DPMD, Systems Command, DPXA (chief), DPMY (director)
Wilson	268X	PhD	C73XX, DPXA (branch chief), DPXA (chief), AFHRL (chief MO) -

Note: Glossary in front of report spells out these office symbols.

Specialist Versus Generalist

This is an old dilemma that personnel has struggled with for all its specialities. Tradition holds that officers are officers first, specialists second. The need for generalists in the logistics arena was underscored by General Marquez in the Fall 1985 issue of the Air Force Journal of Logistics. "We must push for a complete logistician. We must have more complete understanding of the entire flow of logistic processes. We can't afford to build specialists. If you know how the other parts fit together, contribute to your speciality, then you can achieve synergism." He further reflected concern during the 1984 Air Force Logistics Conference whether the Air Force was properly raising its senior logistic leadership. Officers have had successful careers by rising to the top in their specialty without venturing out into other specialities or environments. These officers have had little opportunity to understand other logistic elements and orchestrate them into a balanced combat support capability. He contends the Air Force needs leaders, not specialists.¹

¹ Air Force Journal of Logistics, Fall 1985, p. 2.

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Yet, the world is becoming more complex and the need for specialized knowledge and skills is increasing. Weapon systems are being built with highly advanced technologies. Management systems have increased in complexity and sophistication. Further, the Air Force is under more external review to conduct its mission more efficiently. The technical expertise of these external critics has increased. This drives some officers toward more specialization. The issue is how to get a more specialized job done while still developing the generalist leaders that will later emerge as the senior leaders of the Air Force. The trend toward specialization creates a dilemma for all military professionals. A premium on specialized knowledge means professional breadth can be acquired only at some cost in ones primary field.²

Functional Versus Pure Analyst

For the 26XX officer, there are two principal paths that can be taken over a career as an analyst -- develop as an analyst within one functional area or stay in "pure" analysis jobs and have assignments in several functional areas. The former path allows the officer to gain deep functional knowledge and thus compete for at least some of the key positions in that functional area (such as the research and analysis jobs in personnel). The latter path allows one to experience several areas of the Air Force and, hopefully, bring this diverseness of experience to bear in creative and objective ways. But, officers following the latter path will not be competitive within a particular functional area for the key positions. They will compete for positions within the "pure" analysis arena.

Career Counseling or Not

According to the Officer Professional Development program currently being espoused by the Chief of Staff General Welch, "an officer's number one concern should

² Air Force Journal of Logistics, Fall 1985, p. 14.

be job performance; and, what the job is depends totally on what the Air Force needs an officer to do at a given time in his or her career -- not what the individual needs to do to get promoted. Job performance should be the key to advancement in the Air Force." He further states, "we need to take the secrets out of an officer's professional development and show our people that the system will take care of them as long as they concentrate on doing their jobs."³ And yet, on the other hand, there is evidence that personnel want some guidance. In an occupational survey report on the 267X career field, the Occupational Measurement Center concluded that there was a lack of functional management leadership for behavioral scientists and that the various sub-specialities (like human factors) developed their own leadership. They further concluded that this lack of leadership for the entire speciality is a problem and needs attention if behavioral scientists are to be a more effective force in Air Force research and applications for manpower-personnel-training.⁴ This same sentiment was expressed by Air Force civilian operations research analysts as a result of a panel meeting held last November. They discussed the merits of establishing a career-management program that would provide them the leadership they desire.⁵ Officers have requested career guidance repeatedly over the years. They want to know how to get ahead, what professional goals to strive for, what jobs to go after, what professional development activities to pursue, etc. As recognized by the Officer Professional Development study, the pendulum had swung too far toward careerism as exemplified by the excessive drive to "fill squares" and not concentrate on performing the job at hand. The issue here is what kind of guidance should be given or should the young officers simply trust the system to take care of them.

³ Air Force Policy Letter for Commanders.

⁴ Occupational Survey Report: Behavioral Scientists (AFSC 2675), Scientific Managers (AFSC 2616) and Related Specialties, December 1984, p. 90.

⁵ PHALANX, March 1989, p. 11-12.

APPROACH

The dilemmas discussed above, along with several more specific sub-issues, were consolidated with the descriptive material on key offices and jobs into an issue paper. This paper had thirteen issues and was sent out to over two dozen officers or retired officers. Those officers were knowledgeable in these matters and had an interest in helping shed some insight on an area that has had much discussion over the years but no systematic survey and study of it. We received eighteen responses almost equally spread out among officers from three specialities -- 267X, 268X, and 73XX. The results were primarily qualitative in nature and are summarized in the next section.

RESULTS

1. Should these key positions be filled with specialists or generalists? Is there a middle ground?

All agreed that generalists were preferred, (could be from either 26XX or 73XX) the best person should be selected, performance should be the deciding factor, the key jobs needed good leaders and good managers, and that the selection and success of the individuals filling the key billets is very dependent on their relationship with the senior leaders. The responses differed greatly, however, when they addressed the critical experience requirements. While all thought the individuals needed experience in personnel and experience as an analyst or at least interaction with analysts, they differed as to which experience they thought was most critical. The personnel officers thought functional personnel knowledge was crucial while the 26XX officers thought the technical/scientific background was crucial. This was characterized as the "family dilemma." One officer classified the personnel jobs into two classes -- mainstream personnel jobs and

plans/analysis/research jobs. He further noted that it is very difficult for individuals to transition from one class to the other.

2. How does the 26XX career field utilization pattern fit with current professional development thinking which is to learn your job in the early part of your career and then broaden out as a junior major? Does that make sense for an analyst?

The 26XX career field utilization pattern fits in terms of learning "dirty hands" activities at first and growing to conceptualization activities. The philosophy does not fit well regarding level of assignment and learning about the Air Force. Many 26XX jobs are at the headquarters of a major command or higher staffs, which in many people's opinions, is too high a level of assignment to learn the basics of the Air Force. This puts more pressure on the individual officers and their supervisors to ensure that young officers get out of the headquarters and into the "field" to gain exposure to better know the people, functions, and problems of all of the Air Force.

3. If an analyst sticks strictly to learning the analysis specialty and getting the requisite education in the early years, will he or she learn enough about the Air Force to be an effective officer and also an effective analyst? Command experiences?

The consensus is that it is possible for these officers to learn enough about the Air Force if they are motivated and attentive. It is more effective if they are able to work in different commands and at different levels. This will give them a bigger view of the issues and they will acquire meaningful Air Force experience along the way.

4. How is a career 26XX officer different from a civilian analyst? Is it what could be called "blue suit" relevance? This means having the credibility and ability to relate easily to other Air Force personnel at all levels of assignment. If that is the key difference, how and when does the officer get "blued" and stay "blued"? If that is not the key difference, then why not make more use of civilians?

Blue suit relevance or credibility is the key factor. Most agreed that a mix of military and civilian analysts was needed but most thought recruiting civilians would be difficult, especially in the Washington, D.C. area, and that retention/turnover in large metropolitan areas would be a constant problem.⁶ The military presence would always be needed. This was highlighted in a GAO study of the military/civilian mix of the Air Force Weapons Laboratory. The philosophy espoused military staffing for various reasons such as maintaining rapport with operational commands and serving as a training ground for Air Force officer scientists and engineers. The benefit of a military presence is new blood and innovative ideas. This staffing philosophy is rooted in the thinking of Hap Arnold and Bernie Schriever, two of the Air Force's founding fathers: air power is directly related to technology and its linkage with weapon systems through quality "mission analysis." These comments also apply to the personnel research and analysis function.

5. How much advanced education should the 26XX personnel analysts get and when? If they become too academic, will they fare well on promotion boards? Will they be officers first, specialists second? If they don't get enough, can they be effective analysts?

⁶ The civilian analysts and military officers completing their initial commitments possess very marketable skills and will be barraged with temptation to join civilian consulting firms or large corporations.

All agreed that advanced education to the masters level was needed and that some PhDs were also needed. The need is for clever and innovative thinkers. It is performance that should be the primary focus, not degrees. The dilemma raised here is that the Air Force needs highly skilled analysts to discuss issues with the critics from external agencies. Yet, if too much effort is expended getting this expertise, it detracts from Air Force relevance and therefore the officer's potential to successfully compete for promotion may be reduced. The key is to keep balance -- more civilian analysts could help achieve this.

6. Grade structure -- is there sufficient promotion opportunity within the 26XX field within the personnel community to attract and retain good quality officers? Current practice does not provide much opportunity for 267X officers to progress to colonel. Should more of the key billets be filled with personnel from the 267X career field?

The officer management concept in the Air Force is not to manage by specialty. Officers, particularly as they progress into the field grades, are to be able to move from one career field to another within a broad career area. Promotions are not allocated by specialty. The Army, on the other hand, has a more defined officer management concept whereby officers stay in a corps (e.g. signal, armour, artillery) and these corps are managed and promoted as distinct separate groups. Therefore, in the Air Force, trying to develop assignment patterns that enhance promotability or lead to specific jobs is a "bankrupt exercise" to quote one officer. Officers are officers first and specialists second. This sounds good in theory, yet assignment flexibility for these officers is quite limited. One suggestion was for 26XX officers who do well in personnel to be merged into the 73 career field at some upper grade (like many do now).

The grade structure seemed acceptable to most of the respondents. Those who are good and not too specialized do well.

There was no push to fill key billets with 267X officers; most thought these behavioral scientists were too narrow.

The general conventional wisdom is that if one stays as a specialist (in any field) too long, the probability for promotion is greatly reduced. Officers must show they have the ability to handle a diversity of jobs and assignment levels.

7. A scientific manager (261XX) is not universally assignable for all 261XX assignments. Most users want a 261XX with a particular specialized background. For example, personnel managers want 261XX personnel that have experience in 267XX or 268XX. They would be much less disposed to want someone who has grown up as a nuclear research (266XX) officer. Should the utilization philosophy be changed so that the either; (a) the specialty career fields can have a dedicated field grade specialty for that specialty; or (b) scientific managers become more generalist in nature so that the specialists can flow into the 261XX billets universally?

The 261X scientific manager specialty is a collection of company grade specialties that feed into it from fairly diverse areas (chemical research, computer research, nuclear research, physicist, behavioral science, and scientific analysis). As discussed in the Occupational Survey Report, the 261X field is working in that 261X personnel seem to be qualified for the positions they are in because very individualized selection and assignment actions are being undertaken to ensure a good match is made of job requirements and personnel qualifications.⁷

⁷ Occupational Survey Report, p. 67.

The consensus was for the generalist, option b. The idea of merging with the 73XX career field at some point was mentioned several times. Another idea was to eliminate 267X, expand the Y73XX specialty, and to have the 268X officers in personnel merge into the Y73XX at some point. Another respondent called for eliminating barriers between the 26XX and 73XX specialties. Still another concept related to the need for specialization, called for creating a three tiered structure just for the 267X behavioral scientists -- 2671 (entry level behavioral scientist), 2674 (company grade behavioral scientist), and 2676 (behavioral science managers).⁸ There seemed to be more sentiment among the 267X officers to merge their specialty with personnel (73XX) rather than the 268X scientific analysts.

8. Where should lieutenants in the 267X and 268X fields be assigned if they are to start out in the personnel research and analysis arena? If they start out at AFHRL, then what is their role there? They cannot provide blue suit relevance as a new lieutenant. They cannot perform highly scientific research like the experienced civilian researchers. Is their role to intern to these researchers and learn how to do research? Likewise, if they are assigned to DPMY or DPXA, they are at a high level and still must intern to some experienced scientist or analyst. Further, they will not be gaining much "real Air Force" experience. Another possibility is to send them out to work on a base learning what the Air Force is all about. But, they would not be making use of their education and this could adversely affect their retention decisions. Perhaps they should be required to have a functional tour first before beginning their 26XX work. The issue is how much emphasis the Air Force wants to put on "officer first, specialist second" as it relates to the utilization of these 26XX officers.

⁸ Occupational Survey Report, p. 68.

Regarding initial assignments -- if one starts at AFHRL, one respondent suggested that these young officers should not be used as bench scientists but rather as officers that coordinate and interact with the users. They should not be put on long-term research projects but rather be used as deputy chiefs so that they can better understand the relevance of Air Force research and development to the rest of the Air Force. Most agreed that initial assignments to the Analysis Division or the Plans, Programs and Analysis Directorate were less desirable.

The aspect with the most diversity dealt with the value of base-level functional assignments. Some thought this experience was invaluable and critical if one was ever to have any Air Force relevance. Another thought these base-level jobs were mostly not germane. Still another thought analyst jobs provided the best view of the broad Air Force. One respondent cited the cost of having these officers take assignments at base level to learn about the Air Force and thought the Air Force could not afford it. One called for alternating assignments -- one as a 26XX officer, the next in a non-26XX job.

9. It has always been desirable to establish a pool of analysts to feed the functions described above. The issue is the identification of the organizations which should feed the analysis offices. Should it be the Behavioral Science Department or Mathematics Department (or both) at the Air Force Academy? Air Force Systems Command? (and if so where in the command?) Or is it a combination of these agencies? Who will or should maintain the control -- and how can that best be assured? Or Air Force Operational Test and Evaluation Command?

All agencies mentioned were considered workable. It was suggested that the key personnel research and analysis colonels work closely with Air Force Military Personnel Center assignment teams and also with the Air Force Systems Command Professional Development Office.

10. A philosophy about career-broadening assignments for 26XX officers should be articulated. If these officers stay as specialists for their entire career, they will have reduced promotion potential and even if they do continue to get promoted, the assignments available to them will become much more limited at the upper grades. Further, if they perform their research and analysis without a blue suit grounding, they will have the risk that their work will not be as effective as it needs to be. Thus, the issue is when and what kind of career-broadening tours should they have? Further, is there a need to have a "command identity" to make colonel? Does an officer need "field" experience to show that he or she can run an operation of some sort? Finally, when the personnel analysis officer ventures out to the "real Air Force" and competes within a command with the command's well-established officers, will they remain competitive?

The consensus was that career-broadening assignments were desirable and needed. They are available if managers and supervisors as well as the individual officers stay alert for the opportunities. It is desirable to get experience in several areas so as to ensure fresh thinking. Regarding competing within a major command -- those who are talented and hustle will compete well. Command identification seemed important to several of the respondents. Another noted that the intelligence and comptroller career fields have approaches to professional development that do not depend on major command identity.

11. Assignments after holding a key O-6 billet have been varied as shown earlier. Some likely opportunities for the non-rated 26XX officers include: base commander, major command deputy for personnel, recruiting group commander, Air Training Command technical training, OSD, and laboratory commander. Many of these officers have readily-transferrable analysis skills and are quite marketable in the civilian sector. Are the Air Force opportunities sufficient to

retain enough of our quality officers for the key research and analysis billets? And does the Air Force have a difficult time finding these rather specialized analysis colonels follow-on assignments?

Not much concern was expressed on this issue. Those 26XX officers that want to stay more in the specialist/analyst role will probably leave. The Air Force will see them as too specialized and will have a difficult time finding meaningful assignments for them in more responsible positions. If, on the other hand, the individual wants to branch out, there are plenty of opportunities available.

12. New Y7311s are now trained in manpower-personnel-training analysis at the Naval Post Graduate School. Should they receive more analysis education? Should that occur at the Air Force Institute of Technology or the Naval Post Graduate School? or both? Should this be the only route to a Y prefix designation? What criteria should be used for selection into this program?

There was general concurrence with the objective of the Y73X program. A need to better institutionalize it was noted. Training location was not the issue; either Naval Postgraduate School or the Air Force Institute of Technology were considered acceptable. Several thought more in-depth analysis training should be given.

13. Where should Y73XX officers be assigned? Should they be in the analysis shops, in traditional personnel activities, or both? What is the proper split?

The consensus was to assign them more to the functional areas, perhaps as much as a 3 to 1 split.

SUMMARY AND OBSERVATIONS

Individuals selected for these positions need to have knowledge of the personnel functional area as well as either experience as an analyst or experience in using analytical results.

This study looked at two issues that are separate, but related. The first dealt with the key leadership jobs in the personnel research and analysis offices. These colonel-level jobs have been filled with personnel from the 26XX career field as well as from the 73XX career field. As expected, the best person available at the time was selected for the position. The challenge facing the personnel community is how to ensure in the future that there will be a sufficient pool of qualified personnel to fill these critical positions. The related issue involves what staffing planning should be done by the leaders in personnel to recruit and retain a steady flow of qualified 26XX officers to fill out the personnel research and analysis offices at all levels, some of which will emerge and be competitive for the key leadership positions. This involves providing professional development guidance to young 26XX officers.

KEY LEADERSHIP POSITIONS

Two key leadership positions, the Analysis Division Chief and the Plans, Programs and Analysis Director, were reviewed from a historical viewpoint to see if any patterns were evident. Officers with ^{73XX}~~26XX~~ as their principal specialty, filled these positions nine out of the nineteen times. Likewise, 26XX officers had five of these assignments and officers that were principally pilots held the positions the other five times. This mixed pattern indicates that experiences and skills over and above the scientific/technical skills that 26XX officers obtain are important in deciding which officers will fill these positions.

STAFFING PLANNING

Staffing of the research and analysis offices is primarily with 26XX officers. These officers must acquire functional personnel expertise as well as general Air Force relevance if they are to contribute at the upper levels of these research and analysis offices. Professional development guidance to the young 26XX officers needs to address how these officers obtain advanced education and functional or general Air Force experience. It must also recognize that some of these officers may want to continue as "pure analysts" serving in several functional areas. There are many paths and sequencing alternatives as seen from reviewing career histories of individuals who have served in this arena. Manning of these offices and the associated professional development guidance must balance these objectives and weave the 26XX officers in and out of the various activities. The recent establishment of personnel analysis offices at some of the major commands should facilitate this.

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