Organization and Management Techniques for Collegiate Flight Training Programs -- A Foundation for Improved Human Resources Management

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ABSTRACT

Whether an organization has one employee or 1,001, the effective and efficient use of time and effort is an on going challenge for management. The collegiate flight school is no different from any other business enterprise and is fertile ground for the implementation of many techniques of human resource management which have existed for sometime in the educational and business administration fields. Through an examination of several historically significant models and concepts that have been utilized to improve the productivity and health of the organization, it is the intent of this paper to equip the flight school manager with some effective "tools" with which to develop and sustain a happier and more viable unit.

Organization and Management Techniques for Collegiate Flight Training

Programs -- A Foundation for Improved

Human Resources Management

The effective and efficient utilization and management of human resources has become a challenge for managers in virtually any enterprise that involves the need for cost containment, operational efficiency, worker and client satisfaction, quality assurance, and production control. Collegiate aviation programs in general and flight training operations in particular all have need to meet the same goals and objectives.

The purpose of this document is to attempt to provide college/university flight training programs with ways to develop a better organizational climate and management team. The primary premise is that these tasks can be accomplished through the utilization of a number of techniques and practices that have, over a period of years, become common "tools" in the arena of business and educational administration. Through an investigation of many landmark management techniques, it is the intent of this study to provide the flight operations manager with a more effective and efficient method of organizing, operating, and evaluating operations within his/her span of control.

Particular emphasis will be placed on the Weberian Model of Bureaucracy, Theory X and Theory Y, the Managerial Grid, and Quality Circles. Even though many of these organizational models, techniques, and practices may be considered by some to be rather passe', they nonetheless may be utilized in whole or in part to advantage in many college and university flight training organizations.

Background

For the purpose of this discussion, a three tiered level of unit organization will be employed to exemplify a the collegiate flight training organization. The three levels include manager, worker, and product/client.

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Manager

The management figure in such an organization may have the title of aviation department chair, coordinator of aviation, director of flight operations, chief flight instructor, or a combination of those descriptors. Whether the manager holds faculty rank or not will be dependent on the specific situation within each college or university and will not be considered as having an impact on this study.

The primary responsibilities of the manager are to supervise all flight operations, insure product (student) quality, certify training records, prepare budgetary reports, monitor the financial health of the operation, facilitate communication within the organization, and delegate any responsibility to subordinates that is appropriate. Such functions are consistent with the model proposed by Hersey and Blanchard (1982) that indicated that the process of managing includes planning, organizing, motivating and controlling.

Henri Fayol (1841-1925), a pioneer in scientific management, may have provided the basis for Hersey and Blanchard's four levels of duty. Fayol defined the management functions as planning, organizing, commanding, coordinating, and controlling (Hoy & Miskel, 1982). It is interesting to note that the notion that management had a role in motivation did not appear to be a consideration at that time.

As with any organization, the manager is usually accountable to someone above them in the structure; such a situation commonly exists in the collegial model. A customary title for the immediate supervisor may be chairperson, dean, coordinator, director, or quite possibly vice president. An important comment that is appropriate at this juncture is that although the university or college flight school exists in a scholarly environment, it is still with respect to organizational structure and quite often behavior a bureaucracy in the classical sense.

The challenge of such a situation is to take the best of the bureaucratic model and combine it with productive methods of team building while successfully operating in an academic setting. Accounting for so many variables such as these can be an extremely challenging situation.

It is important to note that in a very large academic organization, there may exist an intermediate level of management between the chief flight instructor and the flight instructor. An appropriate title at this level would be assistant chief flight instructor. Responsibilities of this position include many of those presently assumed by the chief flight instructor.

An additional factor that can have a significant effect on the management structure at all levels is whether the flight school is certified and operates under Federal Aviation Regulation (FAR) 141. While an indepth discussion of the implications of this FAR is beyond the scope of this study, additional information is available in AC-141-1 or FAR 141.1 (a) through (f).

Worker

The worker in the collegiate flight school is the flight instructor. The flight instructor has the direct responsibility for providing the necessary flight and ground instruction for students enrolled in training courses, maintaining training records, monitoring periodic equipment maintenance, preparing student charges, and any other duties specified by superiors.

Although it is customary for flight instructors to be employed full-time, many institutions have periodic need for additional part-time flight instructors or flight instructor assistants. If such a condition exits, the University Aviation Association (1976) in its College Aviation Accreditation Guidelines specifies the optimum qualifications for part-time positions as well as for full-time flight instructors.

Product/Client

The product of collegiate flight training programs is the flight student and that student's completion of the necessary training and acquiring the appropriate knowledge and skills to obtain flight and ground ratings. Included among these ratings are private pilot, instrument rating, commercial pilot, flight instructor, airline transport pilot, ground instructor, as well as additional aircraft category/class/type ratings.

While the completion of these goals is extremely quantifiable, the primary objective at all times is the quality of the product.

Organizational Analysis

Before any meaningful discussion of improving the management of human resources in flight training programs can proceed, a brief review of classical organization structure and how it relates to an academic setting may be meaningful. "Almost all modern organizations have many of the characteristics enumerated by Weber -- a division of labor and specialization, an impersonal orientation, a hierarchy of authority, rules and regulations, and a career orientation" (Hoy & Miskel, 1982, p. 81).

As collegial as most colleges and universities try to be, particularly with respect to shared governance, these basic Weberian principles are still extremely useful. All too often the existence of a bureaucracy has a less than desirable connotation. Contrary to many popular beliefs, however, such a structure should not be considered as counterproductive to that organization meeting its goals and objectives.

The problem in accepting that a bureaucracy exists seems to be that quite often Weberian concepts have not been defined in positive terms. It may be helpful then to examine how each of these concepts relate to the collegiate flight school.

Division of Labor and Specialization

No one person can be "all things to all people at all times." Accepting this as reality, the manager of the collegiate flight school must attempt to utilize each person in the organizational structure to their, and the organization's, best advantage.

The chief flight instructor, traditionally a "high-time" pilot and/or flight instructor is often too valuable to be relegated to giving only phase/stage checks for a major portion of the workday. This statement does not imply that expertise should not be utilized in the aforementioned areas but rather wishes to suggest that the best use of experience may be in the form of more supervisory duties and less mundane activities.

In a recent conversation with a chief flight instructor at a major Mid-West university, however, the need for the chief flight instructor to always maintain contact with the challenges of primary flight instruction was suggested as an important reason for such utilization. An additional component of such utilization would be that it would help to create a friendlier atmosphere between manager (chief flight instructor) and the client (student); the important issue is still to strive to maintain a proper balance.

Impersonal Orientation

Impersonal orientation is very much an accepted part of flight instruction. The bureaucratic employee, and the flight instructor, are expected to make decisions based entirely on facts and not on feelings.

Quite often, particularly in the case of a somewhat inexperienced flight instructor, the student and the instructor can become too personally involved for the instructor to make unemotional decisions. Such occurences must be handled carefully but expediently.

The flight instructor who "helps" the student too much or too often is in reality not helping the student at all. Flying requires, in addition to aeronautical skill and knowledge, a great deal of self-assurance and almost continuous decision making; the flight instructor

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must strive to develop these qualities -- being overly personal and too helpful can many times be very counterproductive. The relationship that must be strived for between the instructor and student is one of interaction ". . .without hatred or passion, and hence without affection or enthusiasm" (Hoy & Miskel, 1982, p. 81).

Hierarchy of Authority

The military refers to hierarchy of authority as "the chain of command" or more informally as the "pecking order." In more simplistic terms, such descriptors identify an organization in which each lower office is under the control and supervision of a higher one. Weber (1958) provided an interesting idea about hierarchy and levels of graded authority in that ". . .such a system offers the governed the possibility of appealing the decision of a lower office to its higher authority, in a definitely regulated manner" (p. 197).

Situations sometimes exist when working with flight students which require evaluation by a higher authority. An example of such a situation could be the need to evaluate unsatisfactory student progress. While this may be in reality not a common practice in many organizations, the need for phase checks, flight evaluations, or graduation certification is often an everyday occurrence in a flight school particularly one that is operated under FAR 141. The fact that the structure for such action is a function of the bureaucratic model, and is in place allows the operation of the organization to be maintained with a minimum of disruption.

Rules and Regulations

Functioning under many very specific rules and regulations seems to be a common situation in most flight schools. In their purist sense, rules and regulations provide continuity, coordination, stability, and uniformity -- this should not be thought of as dysfunctional.

Flight instruction, as well as the operation of the flight school itself, requires performance within many clearly defined parameters. Imagine a flight instructor or a primary flight student that did not know the required completion standards for a specific flight operation or maneuver! What should be cautioned against is the application of rules or regulations in such an extreme manner that what is really occurring is nothing more than disciplined compliance. "Such formalism may be exaggerated until conformity interferes with goal accomplishment" (Hoy & Miskel, 1982, p. 84).

Career Orientation

The opportunity to "move up" within an organization is usually an extremely positive incentive to any member of that organization. The collegiate flight school can exemplify that bureaucratic characteristic if one considers the opportunity to climb "career ladders" from flight instructor to assistant chief flight instructor to possibly chief flight instructor as a means to encourage employees and a way to enhance retention.

An additional incentive for a career orientation in an academic flight program can be in the form of increased pay for additional ratings or flight instruction hours given. The dysfunction in this bureaucratic trait is that conflict can often occur between achievement and seniority. The fact is that a flight instructor should not be rewarded solely on experience, the quality of the product (student) must always be factored into any decisions on promotion, retention, or recognition.

Toward Better Resource Management

Since the beginning of the scientific management movement over 80 years ago, the science of administration has evolved through three phases. Although these phases overlap somewhat, they can primarily be identified as the classical period which dates from Taylor's work in the early 1900s, through the human relations approach of approximately 1930, to the behavioral science school which became well established

following World War II. Although each of these stages has had an effect on contemporary business practices, of foremost importance in human resources is the management behavioral school of thought.

Based on the work of Bernard, Simon, and others the behaviorists have provided the modern manager with many powerful tools and techniques with which to improve organizational health. Before a discussion of these practices can occur, some thoughts by Lehrer may be helpful.

> Every organization has a mission. It is its reason for being. Strategies and objectives are developed to guide the organization toward fulfillment of its mission. Conceptually, strategies and objectives are the basis for determining a set of functional specifications for accomplishing a mission. These specifications define the functional organization, which is translated into the formal organization by adding the physical dimensions -- mainly the human resources needed to perform the functions to achieve organizational objectives. (Lehrer, 1983, pp. 7-8).

The need to define the importance of the individual in terms of whether an organization achieves specific goals and objectives is one of the most important uses of management theory in general and resource management in particular. As previously stated, the need or even the desire to provide a motivational component in the management function did not exist until well into the 20th century.

The Hawthorne Study at the Western Electric Company's plant near Chicago in 1927 is considered as the landmark study in improving human relations in a work setting. Even though the intent of the original project was to determine the effect on productivity resulting from changes in work scheduling, rest periods, lunch breaks, and various industrial lighting arrangements, the resulting determination that production can be linked to other than tangible rewards was an important finding. Suddenly, the question of

motivation or simply what makes people perform and either do or not do their job received considerable attention. Although the Hawthorne findings and the study itself may have been biased and flawed as suggested by Lee (1980), the fact that something increased employee productivity other than traditional rewards was an important result.

Since this document is attempting to make a case for better human resource management in a specific collegial organization, the assumption that a university flight school is no different than any other organization in terms of what makes people do what they do and when they do it must be strongly suggested. What makes a manager effective and an employee satisfied and productive in one organization is just as applicable to another setting. The question of why this occurs seems to hinge on the word "motivation", a more detailed examination of that phenomena is appropriate. McGregor (1967) found the following:

> Strictly speaking. man is by nature motivated. He is an organic system, not a mechanical one. Inputs of energy are transformed into outputs of behavior. We do not motivate him because he is motivated. The work of Maslow suggested that human needs are organized in a hierarchy with the physical need for survival at the base. Generally speaking, when lower-level needs are reasonable well satisfied, higher levels of need become relatively more important as motivators of behavior. (pp. 10-11)

McGregor's Theory X and Theory Y are well known postulations in management theory. What may not be well known is the fact that ". . .Theory X and Theory Y are not managerial strategies: They are underlying beliefs about the nature of man that influences managers to adopt one strategy rather than another" (McGregor, 1967, p. 79). What must be gained from an investigation of McGregor's work is that people are different with respect to the view that they have concerning organizational productivity and how they fit into the scheme of that unit meeting its goals and objectives.

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What motives each individual, whether manager (chief flight instructor), employee (flight instructor), or client (flight student) can and usually is very different. Some of the more commonly accepted motivators are survival, security acceptance, approval, belonging, control, caring, and money.

Blake and Mouton (1978), in The New Managerial Grid, offer many valuable insights concerning how a manager can, by using a grid system based on task behavior, relationship behavior, and the maturity of the followers, motivate organization members to increase productivity and effectiveness. While the managerial grid identified many of the important components in the scheme of motivating followers, the grid should not be thought of as a rigid constraint but should be used in concert with a flexible managerial style commonly referred to as situational leadership.

Situational leadership stresses that ". . .there is no one best way to influence people. . .; which management style a person should use with individuals or groups depends on the maturity level of the people the leader is attempting to influence" (Hersey & Blanchard, 1982, p. 151). In reality, the management style of the leader can include telling, selling, participating, and delegating. It does not take a great deal of imagination to see that each of these styles is applicable almost every day in flight training operations -- the trick is to know when and with whom to use each of them!

A great deal of excitement as well as concern has been apparent in this nation's industrial community with respect to the quality of products that have been coming from foreign, and particularly Japanese, manufacturing concerns over the past 10-20 years. It seemed that American buyers have been quick to purchase automobiles, cameras, electronic gear, and countless other hard goods that were perceived to be better as well as cheaper than those manufactured in this country. The question that needed to be answered was how could an industrial power like the United States be beaten so handily at its own game.

As a result of extensive investigation by American educational and business scholars, it was determined that an unusual relationship existed between Japanese employer and employee. The unifying force was Theory Z.

Theory Z advocates ". . .contend that the Japanese quality edge comes from a management style based on trust and on worker involvement in decisions that affect the product. . . .the assumption is that workers have ideas and if those ideas are heard and used, the result will be a more satisfied, motivated, and productive workforce" (Nichols, 1984. p. 72). This description does not imply that Theory Z, informally called the quality circle, is a loosely organized discussion group; on the contrary, a quality circle is a highly structured activity that is taken quite seriously by all participants. Could this work in higher education flight training program?

Many activities similar to a quality circle have been a part of most academic flight schools for some time. Whether it is called a staff meeting, a breakfast discussion group, or any of many other names, the nucleus is present -- the structure may not be developed. In addition, the collegiate community has one of the largest collections of intelligent as well as creative people as any manager could hope to have in any organization -- better utilization of these talents could provide large dividends.

Conclusions

This document is not attempting to serve solely as a model for the "ideal" collegiate flight training program; as noble as that would be, too many variables exist within the unique constraints of any one organization for that to happen. There are many other theories and techniques that could be effective with the university or college flight school and should be investigated.

Of particular interest for additional reading may be the work of Katz and Kahn (1978), Fiedler's (1967) Leadership Contingency and Situational Leadership, the

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Immaturity - Maturity Theory as developed by Argyris (1971), Herzberg's (1966) Motivation - Hygiene Theory, the work of Odiorne (1971) with Managing by Objectives, or the Likert (1967) Four Systems. While there are other authors that are important; the idea is to become better acquainted with many of the business/educational administration models and techniques that are available and then to apply those that seem most appropriate. The results could be a much more effective and efficient organization.

Why should a person administering a flight school expend the time or effort for such a project? Because a flight school is in reality a business. A college or university flight school many times can be considered as "big" business (it is not uncommon for the cash flow for a large operation to extend well into the millions). The trap is that because such an organization exists in a community of scholars, management often loses slight of the fact that it is still a business and must be operated as such an organization.

Academe is not so different from this nation's business world. Our products, and therefore, our management needs improvement. Aviation and flight training are just as in need of the same attention except that the effects of anything less than our finest effort can have a far reaching impact.

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