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Sutilization of knowledge in implementing goals; and the role of social factors as motivators and demotivators of job performance.

A New Look At Work Motivation: Theory V\*



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\*Presented at "The Science of Productivity" Conference, Washington, D.C. (U.S. Office of Personnel Management), November, 1981. Preparation of this paper was facilitated by Contract N00014-79-C-0680 from the Office of Naval Research, (Organizational Effectiveness Research Program)

### A New Look at Work Motivation: Theory V

## Abstract

It is argued that both Theory X and Theory Y and Marlow's theory, which is taken as the foundation of Theory Y, are inadequate to account for the basic phenomena of work motivation. Theory V (based on the concept of values) is proposed as alternative. This theory consists of six propositions concerned with the issues of: the role of needs and values in guiding action; the role of value attainment in job satisfaction and productivity; the role of money and goal setting as motivators of job performance; techniques for motivating the utilization of knowledge in implementing goals; and the role of social factors as motivators and demotivators of job performance. Conventional wisdom in organizational psychology and organizational behavior holds that the old "Theory X" view of work motivation is outdated and must be replaced by "Theory Y" (McGregor, 1957/1970). Theory y is based on (or held to be compatible with) Maslow's need hierarchy theory of human motivation which is widely believed to be valid (Maslow, 1954).

I would like to suggest that the time has come to replace these shop-worn theories with a more up to date view based on recent developments in the field of work motivation. Before presenting this new view, let us consider the problems with the older views.

Theory X assert's that the average man is naturally lazy, has little ambition, seeks to avoid responsibility and is indifferent to organizational needs. Thus management must direct and control employee actions. Without such direction and control, in this view, employees would be passive and resistant to organizational needs. Control is achieved through the use of reward (e.g., money) and punishment.

Theory Y, in contrast, holds that people'are not naturally lazy or disinterested in work but are only made so by organizational conditions. It asserts that work is natural and that the desire to take responsibility is present in all people. It argues that management's job is to arrange conditions

so that workers will achieve their own goals by attaining organizational objectives. Theory Y techniques would include: job enrichment (delegation), decentralization, management by objectives, and participation.

Maslow's theory asserts that man is motivated by basic needs which exist in a hierarchy. When frustrated, physiological or bodily needs take precedence over all others until they are reasonably satisfied. When these are satisfied, they no longer motivate action and safety needs become most potent, followed in turn by social needs, self esteem (ego) needs, and the need for self actualization ( a concept which is never defined clearly; Locke, 1976). According to Maslow people value or want what they need, so that their actual wants will correspond to this need hierarchy.

While Maslow's theory was not offered specifically as a theory of work motivation, it has been interpreted as being applicable to work. Thus it is widely argued that Theory X is no longer useful because it is based on appeals to the lower order (physiological and safety) needs which are routinely satisfied among today's workers. In contrast it is claimed that Theory Y is more useful because it is based on appeals to man's higher order (e.g., ego) needs which are typically frustrated by modern organizations.

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While the above view has a certain elegant simplicity, it begins to fall apart as soon as one examines it closely. For example, consider the following groups of questions which these theories leave unanswered.

1. If Theory X stresses direction and control, does this imply that Theory Y does not? If not how does a Theory Y boss

insure that the work gets done? Isn't management by objectives, for example, a method of direction and control? 2. Does Theory Y eschew the use of reward and punishment? If so, what does this mean? Is good performance ignored? Is firing prohibited? Is merit pay abandoned? 3. Theory Y implies that man is not naturally lazy but only seems so when organizational conditions fail to motivate him. Isn't this saying the same thing, at root, as Theory X, i.e., that workers will not be motivated unless appropriately directed,

and rewarded?

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4. Does Theory Y really mean to imply that <u>all</u> employees want more responsibility? This does not seem to square with the fact of individual differences (e.g., many employees do not want promotions).
5. If under Theory Y, workers are motivated to work by allowing them to attain their goals through attaining the organization's goals, isn't this just what is implied by Theory X, viz. that employees will be indifferent to organizational needs <u>unless</u> achieving those needs gets them something they want, e.g., rewards?

6. How can one argue that basic needs are routinely satisfied among workers today when unemployment, temporary layoffs, shortened work weeks and even salary cuts are routine?
7. If money only leads to the satisfaction of lower order needs, at what point does the transition to higher order needs occur, e.g., when an employee simply has a roof over his or her head and three

meals a day? If he or she wants a nicer house than the present one, is he or she working for lower order or higher order needs? An what of the desire for wall to wall carpeting? Better cuts of meat? A new kitchen? A swimming pool? A second or third car? Money to use for eating out a nice restaurants? Money for the children's education and a summer home? If money only satisfies lower order needs, why do executives place so much importance on their compensation package? What is the attraction of executive bonus schemes? If money <u>is</u> relevant to higher order as well as to lower order needs, then wouldn't money have to be an ingredient of Theory Y as well as Theory X? 8. If man's needs are satisfied only in hierarchical order, how are we to explain a typical employee's daily activities, which seem to involve the satisfaction of all types of needs and in many possible orders?

9. What is the evidence that individuals can only satisfy their needs in one fixed order? Don't people differ enormously in what they consider important? Aren't there substantial options available regarding which needs an individual will give priority?

10. How can one argue that people's values (wants) correspond to their needs when so many people are unhappy and not in control of their lives (e.g., alcoholism, drug addition, marital discord, mental illness, suicide etc.)

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These questions and contradictions suggest the need for a new approach to the subject of work motivation.

I will call this new approach <u>Theory V</u> because it is based primarily on the concept of <u>values</u>. It consists of six major propositions which represents my summary and integration of what is known about work motivation based on several decades of theorizing and research by numerous investigators. These propositions do not specify every known phenomenon or finding in the area of work motivation; rather they identify broad essentials which are posited as the foundations for a more complete theory.

# Proposition 1. People are motivated at root by needs, but their specific choices and actions are motivated by values.

Needs are the starting point of motivation simply because of the nature of life. Needs are conditions required for a living organism's survival and well being. Life is a conditional process; if a living organism fails to take the actions required by its nature, it sickens or dies. When an organism's needs are frustrated, it feels pain or discomfort. When its needs are fulfilled, it experiences a state of health and well being (i.e., happiness). When needs are frustrated, an organism is motivated to act, although, for a variety of reasons (e.g., lack of knowledge, feelings of hopelessness) it may not actually do so. Needs are not always fulfilled in direct response to frustration, however; action may be taken in anticipation of future states, including the anticipated pleasure of need fulfillment.

Human needs can be divided into two basic categories, physical needs, the requirements of a healthy, properly

functioning body; and psychological needs, the requirements of a healthy, properly functioning mind or consciousness. The bodily needs include, food, water, air, temperature, tissue integrity etc. The psychological needs include self esteem, efficacy, pleasure, growth, love and friendship.

It must be stressed that in reality these two sets of needs are not independent as Maslow implies. If an individual's mind is not functioning properly, it threatens his or her physical well being (e.g., as in the taking of foolish risks, alcoholism, depression, etc.) It is through the proper use of one's mind that are identifies one's needs and determines the means to satisfy them.

On the other side of the same coin, if, for whatever reason, one's bodily health is seriously impaired, the satisfaction of one's psychological needs may be difficult or impossible. For example, a person suffering from starvation or from a serious disease will not be able to grow and experience pleasure as much as a person who is physically healthy.

The evidence of introspection contradicts the claim of Herzberg (1966) that physical, what he calls "animal", needs cause discomfort when frustrated but neutral rather than positive feelings when fulfilled and that the opposite occurs in the case of psychological needs (Locke, 1976). For example, a hungry person enjoys a good meal, just as a thirsty person enjoys a drink. On the other side of the coin, a person whose

psychological needs are frustrated, as, for example, in the case of depression, feels unhappy, not neutral.

While an individual's needs are the basic impetus to action, they do not tell a person what action or actions to take. Nor do they necessarily lead to a "drive" state (Cofer and Appley, 1964). The only <u>automatic</u> result of need frustration, as noted above, is discomfort or pain; this may be physical or psychological or both. To remove the discomfort the individual must discover its cause (i.e., what need is being frustrated) and what course of action is required to satisfy the need. For example, a hungry individual has to identify the fact that he or she is experiencing hunger and discover some means of obtaining food. Similarly, a depressed or anxious person must figure out what emotion is being experienced and why and determine what actions to take to make the feeling go away. If an individual lacks the requisite knowledge or the ability to obtain it, the suffering will continue.

As noted above, this is not to imply that all action is a response to deprivation. Need-drive theories of motivation have long been discredited (Cofer and Appley, 1964; White, 1959). Action is not taken just to avoid pain but also to achieve pleasure. Pleasure is not just a matter of relieving pain. (Locke, 1975).For example, a person who completes a difficult task successfully does not necessarily experience the relief of not failing there may be only positive pride in accomplishment.

Such actions do fulfill needs (e.g., pleasure, self esteem) but can be taken in anticipation of pleasure rather than in response to pain.

This points up a serious flaw in Maslow's need hierarchy theory. Maslow argues that a regularly satisfied need is not a motivator, presumably because the individual is not regularly experiencing any frustration. But this assumes that people take action only in response to pain. If people act for positive pleasure and in anticipation of their needs then a regularly satisfied need can be just as motivating as a frustrated one. For example, consider food. People who eat three square meals a day are not necessarily unmotivated by food: they may look forward with great anticipation to meals; may spend hours shopping for tasty foods and cooking favorite recipes; and may frequently dine out at restaurants of their choice--all because they enjoy it. After a meal they may be satiated, but this is only temporary. Several hours later they will be highly motivated to eat once more, even before they are actually hungry.

This pattern points to a more plausible alternative to Maslow's hierarchy concept: <u>needs are ordinarily satisfied</u> <u>cyclically rather than hierarchically</u>. Consider, by way of example, the activities in a typical day for a typical middle class employee as shown in Table 1. Note that during the course of this day all types of needs are satisfied. While

there may be a sequence of actions within the cycle, each focused on one or two needs, many different sequences are possible and the cycle itself is repeated again and again.

## Insert Table 1 here

Needs which are chronically frustrated may dominate thought and action, but then again they may not. This depends on numerous factors including whether the individual knows what need is being frustrated and whether the person considers need satisfaction to be possible and/or important. A prisoner of war on a semi-starvation diet may think constantly about food, but an individual deprived of certain vitamins may not know what the problem is. A person deprived of love may become sexually promiscuous or may repress all desire.

Certain needs do require a minimum degree of fulfillment for life and action to continue; for example, without air a person will die in 2 to 4 minutes under most conditions; without water death will follow in a matter of days, and without food death occurs in a matter of weeks. The same goes, however, for certain higher level or psychological needs. No individual could live or function with zero self esteem; a person who felt they were totally worthless or incompetent would commit suicide or go insane.

Beyond the minimum needs for continued survival, however, individual's have a choice as to how they will allocate their time, efforts and resources. That such a choice exists and that people differ enormously in the choices they actually make can be observed by anyone.

This brings up another problem with Maslow's theory: the failure to explain individual differences. While all people have the same basic needs, they do not all act the same, even within the same socio-economic class. Related to this is the easily observable fact that all people do not act in accordance with their needs. Maslow (1954) claims that people typically value what they need but this is contradicted by the existence of large numbers of chronically unhappy people, including drug addicts, alcoholics, criminals, neurotics and others who seek things which actually harm them.

These problems can be resolved by positing another motivational concept: that of values.

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Values are what an individual "acts to gain and/or keep" (Rand, 1964, p.25). They are what the individual considers good or beneficial. Unlike needs, values are not inborn. Man is born <u>tabula rasa</u>, without mental content. Values (and knowledge) are acquired through experience and thought. Since people differ in both their experiences (Breer and Locke, 1965) and their thinking, wide individual differences exist in values.

The biological function of values is to guide man's choices and actions in order to fulfill needs. Thus the relation of values to needs is that of means to ends. <u>Values are the link between needs and action</u>.

A given individual's values do not necessarily result in need fulfillment.gince individuals must acquire the values that guide their choices, there is always the possibility that they will make errors in the values they choose. As noted above people do <u>not</u> always value what they need. But even when values are irrational (i.e., self destructive), they still guide action.

Unlike needs (excepting the ways previously mentioned), values <u>do</u> exist in a hierarchy. People consider certain things to be more important than others. Value hierarchies function to <u>allocate</u> time and effort in proportion to how important the individual considers each value to be. Without such a hierarchy purposeful action would be impossible. As noted above some restrictions are placed on such allocation in that an individual must satisfy certain needs enough to survive, although even survival itself is a choice that must be made. Time and

effort can be allocated in differing degrees toward physical and psychological needs, although, as noted earlier these are not independent. Within each of these categories there are also choices. For example, time may be devoted in different amounts to work, family and leisure and within the sphere of work, some people place highest priority on making money; others emphasize finding a secure job, and still others are willing to give up higher earnings for the intrinsic interest of the work (e.g., research scientists). In the realm of moral values, some individuals will sell their souls for a few dollars while others would not sell their integrity at any price. Some people are honest if it is convenient but will sacrifice it for money or power, while others are honest on principle regardless of the temptations.

Contrary to Maslow, people differ enormously in their value hierarchies (which may, of course, change over time within the same individual). One does not have to perform an experiment to prove the existence of individual differences. One only has to observe one's fellow human beings.

It is important to note that, as in the case of needs, an individual may not be fully aware of his or her values or value hierarchy. Thus asking a person what they value will not always yield accurate answers, even when the individual is honestly trying to give them. An individual's values must be inferred from all available information about that person, namely their words, their actions (especially patterns of actions), their choices, their emotional reactions and responses, their tastes, etc.

If a person, for example, claimed to value honesty but lied frequently, had close friends who also lied, showed little remorse when caught lying (except for getting caught at it), and admired public figures and fictional characters who "got away" with things, one would not believe the person's professed value, since they contradict all of the other information. Accurate measurement of values requires a multifaceted approach.

We are now in a position to show how Theory V provides a superior alternative to Theories X and Y regarding man's basic motivation to work. The claim of Theory X that man is naturally lazy and the claim of Theory Y that work is natural are both misleading and incomplete. The Theory V formulation is that an individual will work to the extent that the work involved (e.g., the type of work, place of work, amount of work) is perceived as furthering or facilitating the attainment of his or her values (Vroom, 1964). Individuals may appear lazy because they are nor willing to work hard for what is perceived as very little roward. On the other hand, work is natural in the sense that all people have needs to satisfy and most people find that they can attain values and fulfill needs through working at something. People differ in the kind of work they choose and in how hard they work at it, because they differ in their values and value hierarchies, e.g., ambitions.

No claim is made that individual traits account for all variation in human action. The situation obviously has an impact in that it can limit or encourage certain actions and offer or not offer rewards and punishments which may be valued or disvalued.

For example, an ambitious employee who finds that hard work leads to rate cutting and layoffs, may restrict output. An unambitious employee in a different organization, on the other hand, may work very hard because short term rewards such as recognition are offered which are highly valued.

Proposition 2. If an individual attains the values he or she wants at work, job satisfaction is experienced. If not, job dissatisfaction results. An employee will exhibit a high level of motivation to work or produce only if that is required in order to attain these values.

To understand job satisfaction one additional motivational concept is needed, that of <u>emotions</u>. Emotions are the result of value appraisals (Arnold, 1960; Locke, 1976). Individuals experience positive emotions when an object or situation is perceived as furthering the attainment of their values; they experience negative emotions when an object or situation is perceived as threatening or negating their values. Thus, for example, if an employee wants a pay raise and gets it, there is a feeling of satisfaction; if no pay raise is received, there is a feeling of dissatisfaction and perhaps anger.

While, as noted above, individuals differ in their values, there are certain broad similiarities among employees with repsect to what they want from their jobs based on identical underlying needs. These generally held job values, as I call them, are summarized below (much of the following information can be found in Locke, 1976; see also Gruneberg, 1979).

(a) <u>Nork</u>. In the realm of the work itself, most employees value: ---<u>interesting work</u>. No theory has been developed to account for interests, though they may stem in part from early experiences and past success. People differ in what they consider to be interesting, but they axiomatically value interesting work over uninteresting work. The underlying need is the need for pleasure. ---<u>success</u>. People value succeeding and <u>dislike</u> failing in their work tasks. Success and failure pre-suppose a specific standard of accomplishment, e.g., reaching a production goal, mastering a new task, meeting a deadline, achieving a profit figure. The ultimate value involved is that of achievement and the needs are efficacy and self esteem. People need to feel that they are competent, that they can do things, that they can cope successfully with the real world.

---<u>growth and responsibility</u>. Many, though not all, employees want to learn new skills, develop new competencies, gain new responsibilities and increase their autonomy. While growth is a need, all people do not value it to the same degree. It is probably valued most highly by those in the middle class. ---<u>goal or role clarity</u>. Employees want to know just what is expected of them in their job; they dislike ambiguity, especially when not understanding what their bosses expect them to accomplish leads to a poor or disappointing performance evaluation . This value is probably tied to the need for efficiacy. ---<u>feedback</u>. Both success and goal clarity are facilitated by feedback or information regarding whether one is doing the right thing and whether one is performing up to par. Feedback

can be provided by means of a work measurement system, periodic discussions with the supervisor, contacts with the recipients of the employee's work and other means. Feedback is a means to value and need fulfillment.

(b) <u>Pay</u>. In the realm of pay most employees want: --<u>fairness or equity</u>. Employees want to be paid in proportion to their contribution in relation to what other employees are receiving for their contributions. For example, they resent it when the office "goof off" gets the same raise as hard working conscientious employees. With respect to comparisons outside the organization, employees want to be paid at least the market price for their job. The basic value is that of

justice, which also could be considered a social need. --<u>enough to meet expenses</u>. In addition to fair pay in a relative sense, employees want enough to meet their expenses. An employee could conceivably argue that the pay level was fair relative to other employees but that it was still not enough to pay the bills. Clearly physical needs are involved here as well as the need for pleasure.

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--job security. Employees prefer job security, which actually means pay security, to being faced with frequent or unpredictable layoffs. It is not clear that this value is actually a need; it may be associated (inversely) with level of self esteem. --<u>fringe benefits</u>. As in the case of pay employees want fringe benefits comparable to what others in similar jobs, occupations and institutions are getting, and they also want the benefits

to be as generous as possible. Individuals differ, however, in what particular benefits they prefer and these desires may change over time. For example, young employees may prefer subtantial annual leave and life insurance while older employees may place more importance on medical and pension benefits.

(c) Promotions

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--<u>fairness or equity</u>. As in the case of pay, employees want the promotion system to be administered fairly and objectively. Justice is again the underlying issue.

--<u>clarity</u>. They also want the system itself to be clear; they want to know what one has to do, e.g., what skills, what achievements, what experience, to get promoted. Like feedback, such clarity is a means to an end, i.e., actual promotion.

--availability. Even if an employee thinks the promotion system is fair and clear, he or she still may be dissatisfied if promotions are not available. The most frequent opportunities for promotion are to be found in larger growth oriented companies and organizations. One value and need involved is growth. Self esteem may also be relevant as may the need for efficacy and the opportunity to make more money. It is important to recognize that all employees do not want to be promoted or at least not indefinitely. Higher level jobs are more stressful and may not pay a great deal more than lower level jobs. Some people do not feel capable of higher levels jobs, especially

if they fear managerial responsibility and the need to constantly resolve conflicts. Even those who feel up to the challenge may not think the extra strain is worth what the higher level job pays.

(d) <u>Working Conditions</u>. People want working conditions which entail or promote:

--<u>convenience</u>; e.g., working hours and locations which fit in well with their family life style and activities schedule. For example, this can be achieved with respect to hours of work with flexitime or similar programs. Convenience is a means to the attainment of other values and needs. --<u>safety</u>; employees do not want conditions which threaten their physical health and well being, e.g., dangerous chemicals, gasses, explosives.

--<u>facilitation of work;</u> employees want equipment, resources, help etc. that facilitate rather than impede the successful accomplishment of their work tasks.

(e) Co workers

--<u>similar values</u>; employees feel most at home with co-workers who share their values and interests because they are better able to fulfill their friendship needs with those who are like them. --work facilitation; to the degree that doing a good job is important, employees prefer co-workers who can facilitate task accomplishment, which means who are cooperative, competent and motivated.

## (f) Supervision and Leadership

--<u>consideration</u>; employees want supervisors who are considerate of their desires, feelings, preferences etc.; recognize and give credit for good performance; listen to their ideas, are tactful etc. i.e., they like bosses who give them what they want or value.

--<u>recognition;</u> employees want credit and praise for a job well done; they do not like their accomplishments to be ignored, taken for granted or denied. Recognition fulfills the need for justice and also provides feedback and role clarification. Most employees react defensively to criticism because it threatens their self-esteem.

--<u>Competence.</u> This is known as "expert power" in the literature (e.g., see Yukl, 1981), but the issue is not that all supervisors and managers have to be experts, but only that they know what they are doing. Usually they should know more about the job than their subordinates since they are giving their subordinate orders and evaluating their performance. Employee dislike being told what to do by someone who does not know the job as well as they do, and competent supervisors are able to facilitate the work of their subordinates rather than impeding or ignoring it.

--<u>fairness</u>. People want their bosses to be fair in every aspect of their jobs, e.g., in allocating work, in giving rewards, in performance appraisal, in granting favors. Again the basic issue is one of justice. People may differ, of course, in their standard of what constitutes fairness.

--<u>honesty</u>. Related to fairness is the trait of honesty. Employees dislike supervisors who lie to them, make false promises, or tell different employees totally different stories about the same issue. Managerial dishonesty threatens all the values which the manager can control vis-a-vis the subordinate.

#### (g) Organizational policies

--<u>respect</u>. Most fundamentally employees want the organization's policies to reflect respect for them as persons which means respect for their values. This is demonstrated in a number of ways, e.g., through consistently honest practices and communications; through attempts to develop and maintain a fair reward system and to foster job security; through encouraging two way communication which includes employees' ideas regarding the job and their concerns regarding organization

policies and practices; and through the absence or abolition of petty rules and regulations which make the employees feel like they are children.

--<u>competence</u>. As in the case of supervisors, employees like to work for an organization that is competent, i.e., one that can get things done, that is well organized, that pleases its customers, that makes a good quality product. No one wants to work for a loser. The employee wants an organization that is worth valuing and which can get values.

An employee who gets all or most of the above values from the job will usually be satisfied with it. As a result, the employee may be less likely to be absent or late, less likely to quit, will be less tempted to join a union and will have a positive attitude toward cooperating with the organization (Locke, 1976).

However, this feeling of satisfaction does <u>not</u> mean that the employee will necessarily work harder. If the organization gives the employee everything he or she wants but <u>does not make</u> <u>the employee work hard to get it</u>, high job satisfaction could be accompanied by low productivity. Contrary to some interpretations of Theory Y, allowing employees to fulfill needs will not by itself guarantee high performance. High performance will occur (assuming there is sufficient ability on the part of organization members) when at least some of the job values can be attained only when performance is high. Most importantly, performance goals must be high and rewards to some extent must be contingent on attaining such goals. The next two propositions pertain to the role of money and goals in motivating high performance.

Proposition 3. The fundamental value which an organization can offer employees in return for their efforts is money, because money is instrumental in satisfying (directly or indirectly) all of their needs, including so called higher level needs.

It is a serious error to assume that money is only relevant to the fulfillment of peoples' lower order needs (and associated values). In the first place, a clear separation of lower and higher order needs is not always possible; in most actions both are involved. For example, when an individual buys food, what part of the purchase involves lower order and which part involves higher order needs? When a man buys hamburger instead of spam? When a woman buys steak instead of hamburger? Are bananas a necessity or a luxury bought because they taste good? What about bread? Is Wonder bread a necessity and biscuits a luxury? What of fresh versus frozen broccoli? And what about going out to McDonald's versus staying home? Or what about . going out for pizza or to a steak house instead?

In the realm of clothing, how much of a clothing budget of even poor families is spent on getting sufficient bodily coverings to maintain health and survival and how much is spent on finding clothes that are attractive and colorful?

In buying a house, are lower order needs involved only up to the point that there are four walls, heat and a roof that does not leak? If so, what percentage of people actually buy shelter with only these criteria in mind?

In all of these situations, it is difficult to say what part of the expenditures go solely towards bare physical survival and what part pertain to psychological needs.

Second, satisfaction of subsistence needs does not stop people from spending more and more money in these so called subsistence categories as they become more wealthy. A business executive may want to replace his or her \$150,000 house with a \$300,000 house just as much as a poor construction worker wants to move out of an apartment into a \$50,000 house. Similarly, newly wealthy people may buy \$600 suits instead of the \$100 suits they used to buy, just as waitresses may buy \$20 slacks

instead of \$10 ones as their earning increase. Hot dogs and beans may be replaced by hamburger, then steak and then gourmet food cooked by a maid as income increases to higher and higher levels.

Third, money is, in fact, directly relevant to the individual's higher order needs. The connection is not always as direct as in the case of subsistence needs, but money still helps to fulfill psychological needs and their associated values.

For example, while money cannot buy (genuine) friendship or love it can provide the means to meet friends and lovers since it affects where you can go (e.g., resorts, country clubs, restaurants) and it provides the means by which friendships and romances can be celebrated, (e.g., going out to dinner or the theater, spending vacation time at a hotel or resort, buying attractive clothes, or a nice house, or a comfortable car, etc.)

While it is not rational to base one's self esteem on the amount of money one earns, there are people who try it. But even for a rational person, there is a connection. Genuine self esteem is based on the proper use  $p\hat{x}$  one's mind (e.g., rational decision making); to trust one's mind one must use it to guide one's choices and actions toward some purpose. The act of earning a living is one crucial expression of the productive use of one's mind. One can derive genuine self esteem, not from the amount of money are makes as such, but from the knowledge that whatever one makes, one has earned it.

Earning money is also an expression of self esteem; it reflects the conviction that one's efforts are worth something, that one is capable of trading value for value with other people.

Maslow's concept of self actualization has never been defined intelligibly, but if one takes it to refer to things one would "really" like to do in life, e.g., start an orphanage, turn a hobby into a full time career, quit one's job and sail around the world, start a political action group, publish a newsletter etc. then it is obvious that money would be helpful if not absolutely necessary in order to implement such goals.

The role of money, however, does not stop there. Activities

like taking courses to expand one's knowledge, sending one's children to good schools, taking piano lessons, planting a garden and thousands of other activities that do not fall clearly into any of Maslow's major need categories require money.

In addition to all the above, money is valued for things other than what it can buy directly. For an employee money serves also as a symbol of accomplishment and as a measure of the justice or fairness of the organization's reward system. For those who value achievement in the free market, it is a feedback device for measuring degree of task accomplishment.

In view of all this, it is ludicrous to claim that money is relevant only to the individual's lower order needs. Money is relevant to <u>all</u> levels of needs. It is a store of value and the means to obtain all values which can be bought. In

expectancy theory (Vroom, 1964) terms, money is the most instrumental 'of all work outcomes. In this respect no other organizational incentive compares to it. A pat on the back and more autonomy are nice but they won't pay the rent or for a vacation.

Money can serve as an incentive with respect to every aspect of organizational functioning: it can be used to recruit new employees, to reduce absenteeism, to cut turnover, to increase morale, and to raise productivity.

The importance of money can also be demonstrated in reverse: just imagine totally removing, one at a time, every incentive used by organizations and imagining the consequences. If one removed money, the consequence would be: no employees! The same is not true of any other incentive.

For money to effectively motivate performance at least five major conditions must be fulfilled (for a detailed discussion see Lawler, 1971):

the amount of money offered must be sufficiently large
 to make the extra effort worthwhile; usually this requires at
 least 5 to 10% more money than the employee was making previously;
 the employee must not lose values by working for the
 incentives, e.g., in the form of rate cutting, layoffs, physical
 injuries, or condemnation by fellow workers;

(3) performance must be measurable;

(4) the employee must clearly understand how the incentive system works; and

(5) the employee must be able to control the performance or outcomes on which the payments are based.

When these conditions are fulfilled money can be an extremely powerful motivator of performance. Organizational studies of incentives have shown that individual incentive plans have improved work performance by a median of 30% and group plans by 15% to 20% (Locke, Feren, McCaleb, Shaw and Denny, 1981). These figures are higher than for any other work incentive (e.g., goal setting, participation, job enrichment).

The assertion that people work for money, made by, among others, Frederick Taylor, the founder of Scientific Management, may not be a complete statement of the reasons why people work but it is fundamentally correct (Locke, in press).

Theory V again allows a more defensible (e.g., comprehensive) formulation of the role of money than either Theory X or Theory Y. Money is a reward, a method of control and at the same time allows people to attain their own goals and values by achieving organizational objectives (i.e., by doing a good job). Proposition 4. To effectively direct and mobilize the effort an individual is willing to put forth in return for money, the organization must insure that employees strive for clear and challenging goals.

The payment of money, properly administered, insures that the employee will accept the job, show up for work and be willing to put forth reasonable effort on behalf of the organization. However, such payments do not tell the individual what has to be done to earn the money. Money by itself does not direct employees' activities on the job.

To direct their actions and energies employees must have <u>goals</u>. They must know what actions they are expected to take and what objectives they are expected to reach. With respect to the relation between goals and values, goals are more specific, e.g., get a \$2,000 raise, and values more general, e.g., make money. Goals are both an expression of values and a means to attaining values.

Research on goal setting (summarized in Latham & Locke, 1979; Latham & Yukl, 1975; Locke, 1968; Locke, Shaw, Saari & Latham, 1981; and Locke & Latham, in press) has demonstrated that goals regulate performance most effectively when they are <u>clear and specific</u>, preferably quantitative (e.g., "reduce costs by 5%" rather than "reduce costs as much as you can").

The findings also indicate that the highest level of task performance is obtained when goals are not only specific but <u>challenging</u>. A challenging goal is one that is difficult to reach but is ultimately reachable.

Goals affect performance in several different ways. They direct and guide attention and action, they mobilize an appropriate degree of energy or effort, they prolong effort over time, and they motivate the search for revelvant strategies or actions plans when these are needed to attain the goal.

While goal setting is usually thought of in terms of a Management by Objectives system, it does not have to be part of an MBO program in order to motivate improved performance. Studies of goal setting in organizational settings have shown

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that goals have improved performance on the average by at least 16; (Latham and Locke, 1979; Locke, et al, 1980). The effects of goal setting are also highly reliable. Over 90% of the published studies of goals setting have achieved positive results. These studies have involved a wide range of tasks and jobs.

White and Locke (in press) in a critical incidents study found that goal setting and associated events (e.g., work deadlines, a large backlog of work to be completed) were more frequently associated with high productivity episodes than any other factor. Similarly, lack of goals and associated events (no deadlines, small backlog of work) were more frequently associated with low productivity episodes than any other factor.

It is often asserted that goals will only be accepted if they are set participatively, that is, by a joint decision on the part of supervisor and subordinate. However, a large number of research studies indicate that this is not the case (Locke and Schweiger, 1979). Participation by itself has not been shown to be a very effective motivator. The average increase in output obtained in organizational studies of participation is 0.5% (Locke et al, 1980). In field and laboratory studies combined participation was no more likely to lead to higher performance than to lower performance as compared with nonparticipation. It appears that most employees will accept goals which are assigned to them, providing they are reasonable goals and the supervisor or manager is supportive of the employee. The reason may be that assigning goals is considered to be a legitimate function of management. (The role of

participation in implementing goals will be discussed in the next section).

The effectiveness of goal setting can be enhanced by its association with money, just as the effectiveness of money can be enhanced by its association with goal setting. Sometimes money encourages or promotes employees to set goals, since reaching production goals can be a means to achieve earnings goals. Also, money can be paid in return for goal achievement, as in various types of task and bonus systems. Even well known group incentive plans like the Scanlon Plan (Frost, Wakeley and Ruh, 1974) and Fein's Improshare Plan (Fein, 1977) have goals of

sorts; employees are paid based on the degree to which they surpass agreed upon plant wide performance standards (e.g., ratio of personnel costs to the value of production in relation to an historical average in the case of the Scanlon Plan; time taken to produce a certain amount of work in relation to an historical average in the case of the Fein plan). Further, money helps get employees committed to goals even if pay is not tied directly to performance, since people are still being paid to do what the organization asks (Locke et al., 1981).

If we add the 16% median improvement in productivity obtainable through goal setting to the 30% median increase obtainable through individual incentives, the potential improvement from their combined use is 46%. For group incentives plus goals the potential improvement is over 30%. Clearly these figures are of great practical significance. For example, on a national scale, if we took only one fourth of the lower figure,

of 30%, these techniques could lead to an increase in the GNP of over 7%!

The most direct value achieved through goal setting is that of achievement or accomplishment, especially when the goal which is achieved is a challenging one. Since successful goal attainment usually involves the productive use of one's mind, goal setting helps to fulfill the need for self esteem. Its relation to efficacy is self evident. Employees also report that trying for goals adds an element of interest and excitment to the job (i.e., intrinsic interest, pleasure). Finally, goal attainment leads to practical rewards like money.

The theory V formulation of the role of goals, in contrast to theories X and Y, is that they both: direct and control activity and involve, as in the case of money, arranging conditions so that employees help the organization to attain its objectives while attaining their own. Proposition 5. To motivate employees to bring to bear maximum knowledge when implementing goals, they must be allowed and encouraged to use their own judgement (within the context of their knowledge and skill) and held responsible (e.g., through feedback) for the consequences of their decisions.

It was noted earlier that there is no evidence that participation in the setting of goals leads to consistently higher goal commitment and or performance than non-participation.

Participation may be helpful, however, with respect to goal implementation. Under NBO programs, action plans, i.e., strategies for goal attainment, are supposed to be developed

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for each goal jointly by manager and subordinate. Action plans actually should be set whenever goals are set regardless of whether it is done under a formal MBO program or not.

The degree or frequency of participation, however, should be based on the relative knowledge of supervisor or manager and subordinate. If the manager knows a great deal and the subordinate very little, it will be more efficient to assign both the goal and the means to achieve it. This is, for example, how medical students are taught to practice medicine: do what the teaching staff tells you until you have mastered it. In contrast, if the subordinate knows something that the manager does not, or if the subordinate has the capacity to discover the needed knowledge with out undue delay or damage to the organization, then it makes more sense for goal implementation to be planned jointly by manager and subordinate.

In this respect Theory V embraces neither Theory X, which advocates managerial control, nor Theory Y, which advocates consistent participation; rather Theory V recommends that <u>participation be used depending on the relative degree of know-</u> <u>ledge and competence of manager and subordinate</u>.

There are other mechanisms for bringing employee knowledge to bear on organizational problems. In contrast to participation, which refers to joint decision making, decisions can be fully delegated to subordinates. Delegation is the essence of job enrichment in that the employee is given more responsibility and autonomy in deciding how to do the job. When authority is

delegated to the heads of a number of organizational divisions or groups, it is called decentralization.

Another method for encouraging employees to use their own judgement is the suggestion system. This may be done informally, as with, for example, the use of suggestion boxes which employees use whenever they happen to think of a useful idea.

Suggestion systems can also be formalized, as, for example, in the Scanlon Plan which sets up Screening Committees and Production Committees composed of representative from both the shop floor and management. These committees consider and approve ideas for improving work efficiency offered by their members and employees representated by committee members.

A new development, imported from Japan, are Quality Circles which are formal groups within each department or work unit designed to study and resolve production and quality problems. The development of quality circles may require extensive training of the group leader, for example, in the principles of group problem solving and in the statistical techniques needed to implement quality control.

In cases where an individual is given authority to implement a plan of action or a suggestion, steps should be taken to see that feedback is provided in order to show the consequences of the course of action taken. Feedback is typically a standard element of job enrichment programs and

may be one of the major reasons why it can improve performance (Locke et al., 1980). Quality feedback is the most common type provided in under job enrichment and quality improvements are what are most often found in such studies (Lawler, 1969/1970).

It has even been found that goal setting itself is not effective unless feedback is provided showing the individual's progress in relation to the goal. Especially for those who are lagging behind the rate of progress needed for goal success, feedback is a signal to speed up. It can also be a signal to try a different strategy, if the one already being tried is not working.

Feedback is most helpful when it is exact (i.e., quantitative), necourate and timely, which means, provided as often as needed to monitor, adjust or correct performance. Feedback requires that action or the consequences of action, i.e., performance, work products; etc. be measured.

Proposition 6. Social relationships and incentives can have a powerful impact on employee morale and motivation but all must be used with utmost care because they can work both against as well as for organizational interests.

Consider, by way of illustration, five social phenomena found in every organization: modeling, informal social organization, competition, cohesion, and conflict.

Modeling is a powerful tool of learning and training (Rosenthal & Bandura, 1978) in which a person learns new skills or acquires new attitudes, habits, knowledge or goals from

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observing others. One means by which modeling improves performance is by increasing expectations of self-efficacy (Bandura, 1977). Observing others master a task or problem can increase the expectation that one can master it oneself and lead to actual improvements in performance.

However, the effects of modeling depends on the models. For example, employees who observe negative (inefficacious) models may lower their efficacy expectations. Employees with poor (e.g., authoritarian) supervisors may model these supervisors' behaviors thinking that this is the way to get ahead in the organization. Thus organizations must insure that employees have models, especially supervisory models, who project both competence and the managerial philosophy of the organization.

In all organizations networks of informal relationships develop which supplement the relationships specified by the formal organization, i.e., the organization chart (Roethlisberger & Dickson, 1939/1956; Taylor, 1911/1967). Such relationships are indispensible for efficient organizational functioning because no organization chart could possibly anticipate all the possible situations that might arise in the course of business. Thus, for example, employees often develop unofficial lateral and diagonal relationships both for the purpose of friendship and to improve communication and integration between organizational parts. However, informal social groups develop norms, or shared standards of proper conduct, and these norms sometimes

function to subvert the formal organization and its goals, e.g., "don't produce too much"; "don't squeal when somebody breaks the rules" (Roethlisberger & Dickson, 1939/1956). Subversive norms are most likely to develop when the formal organization is seen as a threat to the welfare of the informal group (Seashore, 1954), whereas the opposite is likely to occur when the organization is seen as supportive.

Similarly, informal personal relationships often develop between superior and subordinate. This is helpful in that each will feel relaxed with each other and communicate openly. Referent power and expert power (the more effective forms of power ;Yukl, 1981) may become more prevalent than legitmate or coercive power. However, such relationships can lead to biased appraisals of the subordinate which may be especially harmful when employees are being evaluated for promotion. This can be avoided to a considerable extent by having subordinates work with a number of different supervisors and having multiple inputs into the appraisal process (e.g., from different bosses, from peers, and from subordinates).

In all organizations some degree of informal competition arises between organization members, especially when performance is measured and fed back to the employees (Locke, 1980). And there is always competition for promotions. Up to a point this can be beneficial, in that competition is a form of goal setting in which the other person's performance is the goal to be beaten.

The tendency is for goals to become more and more difficult as one person beats the other and the other in turn strives to beat the first. Competition may also produce high levels of commitment since beating another person is highly valued by many people.

On the other hand, when competition is formalized and directly encouraged by the organization, negative consequences may result (Likert, 1961). Employees may take more interest in beating the other person than in achieving the goals of the organization. Crucial information may be witheld to make the other person look bad. Cooperation may be undermined. In addition, chronic losers may come apathetic.

Cooperation, of course, is a <u>critical</u> requirement of efficient organizational functioning. This is usually fostered by the use of various types of cohesive groups which function as integrating mechanisms (e.g., matrix systems, overlapping groups, project teams etc.). Such groups often possess more knowledge than any individual member and promote the coordination of a multitude of separate activities toward crganizational objectives.

However, when groups become too cohesive, they may produce groupthink, a thinking disorder in which maintaining group solidarity becomes more important than rational thinking (Janis, 1972). Groupthink leads to poor decision quality. This may be prevented in a number of ways, including changing the group composition reasonably frequently, the use of outside

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experts, competing groups etc. In addition, when people work as part of a team they typically put forth less effort than when working at the same task alone, a phenomenon called "social loafing" (Latané, 1981). Again this may be prevented by taking steps to insure that the contribution of each member to the group product is measured.

Finally, a certain amount of intra-group and inter-group conflict is beneficial in that conflict may inply the existence of a number of differing ideas, which when combined and integrated, may produce a better solution than that produced by a conflict-free group. However, excessive conflict may be caused by fundamental and irreconcilable value differences among group members and can lead to group disintegration. To be beneficial, conflict must be task centered and involve differences only within a context of agreement as to basic goals.

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# Cyclical Model of Need Satisfaction

(one person on a typical day)

DAY 1			DAY 2
Activity	Need	Time	•
sleep	rest	11:30pm to 7 am	Repeat Day 1
breakfast	food & water	7:15 to 7:30am	
work	achievement, self esteem, growth	8:00 to 12 noon	
lunch	food & water	12 to 1 pm	
work	achievement, self esteem, growth	l to 5 pm	
dinner	food & water	6 to 7 pm	
play with kids	pleasure	7 to 7:30 pm	
hospital building committee meeting	self actualization	8 to 9 pm	
phone call to friend	friendship	9:30 to 10 pm	
talks with wife and makes love	romantic, pleasure	10:30 to 11:30 pm	

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Program Manager for Human Performance Naval Medical R&D Command National Naval Medical Center Bethesda, MD 20014

Navy Medical R&D Command ATTN: Code 44 National Naval Medical Center Bethesda, MD 20014

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LIST 6 NAVAL ACADEMY AND NAVAL POSTGRADUATE SCHOOL

Naval Postgraduate School ATTN: Dr. Richard S. Elster Department of Administrative Sciences Monterey, CA 93940

Naval Postgraduate School ATTN: Professor John Senger Operations Research and Administrative Science Monterey, CA 93940

Superintendent Naval Postgraduate School Code 1424 Monterey, CA 93940

Naval Postgraduate School ATTN: Dr. James Arima Code 54-Aa Monterey, CA 93940

Naval Postgraduate School ATTN: Dr. Richard A. McGonigal Code 54 Monterey, CA 93940

U.S. Naval Academy ATTN: CDR J. M. McGrath Department of Leadership and Law Annapolis, MD 21402

Professor Carson K. Eoyang Naval Postgraduate School, Code 54EG Department of Administration Sciences Monterey, CA 93940

Superintendent ATTN: Director of Research Naval Academy, U.S. Annapolis, MD 21402 P4-5/A13 Sequential by State/City/FPO

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LIST 7 HRM

Officer in Charge Human Resource Management Detachment Naval Air Station Alameda, CA 94591

Officer in Charge Human Resource Management Detachment Naval Submarine Base New London P.O. Box 81 Groton, CT 06340

Officer in Charge Human Resource Management Division Naval Air Station Mayport, FL 32228

Commanding Officer Human Resource Management Center Pearl Harbor, HI 96860

Commander in Chief Human Resource Management Division U.S. Pacific Fleet Pearl Harbor, HI 96860

Officer in Charge Human Resource Management Detachment Naval Base Charleston, SC 29408

Commanding Officer Human Resource Management School Naval Air Station Memphis Millington, TN 38054

Human Resource Management School Naval Air Station Memphis (96) Millington, TN 38054 'P4-5/A14

List 7 (Continued)

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Commanding Officer Human Resource Management Center 1300 Wilson Boulevard Arlington, VA 22209

Commanding Officer Human Resource Management Center 5621-23 Tidewater Drive Norfolk, VA 23511

Commander in Chief Human Resource Management Division U.S. Atlantic Fleet Norfolk, VA 23511

Officer in Charge Human Resource Management Detachment Naval Air Station Whidbey Island Oak Harbor, WA 98278

Commanding Officer Human Resource Management Center Box 23 FPO New York 09510

Commander in Chief Human Resource Management Division U.S. Naval Force Europe FPO New York 09510

Officer in Charge Human Resource Management Detachment Box 60 FPO San Francisco 96651

Officer in Charge Human Resource Management Detachment COMNAVFORJAPAN FPO Seattle 98762

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LIST 8 NAVY HISCELLANEOUS

Naval Military Personnel Command (2 copies) HRM Department (NMPC-6) Washington, DC 20350

Navel Training Analysis and Evaluation Group Orlando, FL 32813

Commanding Officer ATIN: TIC, Bldg. 2068 Naval Training Equipment Center Orlando, FL 32813

Chief of Naval Education and Training (N-5) Director, Research Development, Test and Evaluation Naval Air Station Pensacola, FL 32508

Chief of Naval Technical Training ATTN: Dr. Norman Kerr, Code 017 NAS Memphis (75) Millington, TN 38054

Navy Recruiting Command Head, Research and Analysis Branch Code 434, Room 8001 801 North Randolph Street Arlington, VA 22203

Commanding Officer USS Carl Vinson (CVN-70) Newport News Shipbuilding & Drydock Company Newport News, VA 23607 P4-5/A18

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LIST 9 USMC

Headquarters, U.S. Marine Corps Code MPI-20 Washington, DC 20380

Headquarters, U.S. Marine Corps ATTN: Dr. A. L. Slafkosky, Code RD-1 Washington, DC 20380

Education Advisor Education Center (E031) MCDEC Quantico, VA 22134

Commanding Officer Education Center (E031) MCDEC Quantico, VA 22134

Commanding Officer U.S. Marine Corps Command and Staff College Quantico, VA 22134

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LIST 10 DARPA

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(3 copies)

Defense Advanced Research Projects Agency Director, Cybernetics Technology Office 1400 Wilson Blvd, Rm 625 Arlington, VA 22209

Hr. Michael A. Daniels International Public Policy Research Corporation 6845 Elm Street, Suite 212 McLean, VA 22101

Dr. A. F. K. Organski Center for Political Studies Institute for Social Research University of Michigan Ann Arbor, MI 48106

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## LIST 11 OTHER FEDERAL GOVERNMENT

Dr. Douglas Hunter Defense Intelligence School Washington, DC 20374

Dr. Brian Usilaner GAO Washington, DC 20548

National Institute of Education ATTN: Dr. Fritz Mulhauser EOLC/SMO 1200 19th Street, N.W. Washington, DC 20208

National Institute of Mental Health Division of Extramural Research Programs 5600 Fishers Lane Rockville, MD 20852

National Institute of Mental Health Minority Group Mental Health Programs Room 7 - 102 5600 Fishers Lane Rockville, MD 20852

Office of Personnel Management Office of Planning and Evaluation Research Management Division 1900 E Street, N.W. Washington, DC 20415

Office of Personnel Management ATTN: Ms. Carolyn Burstein 1900 E Street, NW. Washington, DC 20415

Office of Personnel Management ATTN: Mr. Jeff Kane Personnel R&D Center 1900 E Street, W.W. Washington, DC 20415

Chief, Psychological Research Branch ATTN: Mr. Richard Lanterman U.S. Coast Guard (G-P-1/2/TP42) Washington, DC 20593

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OTHER FEDERAL GOVERNMENT

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Social and Developmental Psychology Program National Science Foundation Washington, DC 20550 Y4-5/A25 Sequential by State/City

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## LIST 12 ARMY

Headquarters, FORSCOM ATTN: AFPR-HR Ft. McPherson, GA 30330

Army Research Institute Field Unit - Leavenworth P.O. Box 3122 For- Leavenworth, KS 66027

Technical Director Army Research Institute 5001 Eisenhower Avenue Alexandria, VA 22333

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LIST 13 AIR FORCE

Air University Library/LSE 76-443 Maxwell AFB, AL 36112

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MAJ Robert Gregory USAFA/DFBL U.S. Air Force Academy, CO 80840

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Technical Director AFHRL/MO(T) Brooks AFB San Antonio, TX 78235

AFMPC/MPCYPR Randolph AFB, TX 78150

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## LIST 14 MISCELLANEOUS

Australian Embassy Office of the Air Attache (S3B) 1601 Massachusetts Avenue, N.W. Washington, DC 20036

British Embassy Scientific Information Officer Room 509 3100 Massachusetts Avenue, N.W. Washington, DC 20008

Canadian Defense Liaison Staff, Washington ATTN: CDRD 2450 Massachusetts Avenue, N.W. Washington, DC 20008

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LIST 15 (Continued)

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LIST 15 (Continued)

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LIST 15 (Continued)

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