

THE MANAGEMENT OF MAINTENANCE EXECUTING

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Abstract: *The paper solves the management of maintenance executing military vehicles and material and its significance. The position of manager as person who is responsible for check and run of equipment. There are explained basic terminology and methods for management maintenance which have influence to speed and operation reliability. The management maintenance and its influence with economical evaluation of maintenance procedures.*

Keywords: *management of use, management of maintenance, preventive and corrective maintenance.*

1. INTRODUCTION

The word management comes from English and in real life it is being used as an international expression without any need for further translation in other languages. In Czech literature also exists fading word leadership. The executors of management are called managers. Regarding the contents, management is markedly general discipline with wide range of applicability and it is possible to apply it at different stages of hierarchy. Conventional aim of the manager activity is to achieve success of certain organizational unit or process. The manager is defined as a leading worker responsible for reaching the aims of commended organizational units. His main job is to plan, organize and check. In management there is a law saying that for achievement of organization's aims is necessary a mutual harmony in executing managerial duties. Essentially, there has to be a balanced structure of jobs within each manager functions [1].

Managerial roles are mainly characterized by: *Planning, organizing, choosing and placing co-workers, personal security, and team leading and check-up.* By **planning** is mentioned an intention to attain a controlled process or activity of an organizational unit. It is important to fulfill a set time limit- to keep up to a time harmonogram. There could be

many ways how to express the plan. Key are the aims, procedures and source expectations for reaching those procedures, control criterions and classification of an achieved results. Planning is one of the most essential bases of successful manager activity. For creation and realization of each plan it is necessary to provide an analysis, decision making for choose and implementation, respectively successive plan realization.

Organizing numbers among prime knowledge of management, it is generally considered as an individual sequential function of management. Organizational structures are a form of association of operations or people for securing objectives of organization. A form of association activities and people to secure tasks of organization are organizational structures, which express a form of setting a process of division of labor for rational securing the expected aggregate of operative and executive activities. Nowadays they are based on systematical aggregate of items and relations between them. Nowadays, the interpretation is based on systemic attitudes as a aggregate of components and relations between them. Classificatory characteristics of organizational structures are: association of activities, exercitation of decision-making competence, measure of delegation of competence and responsibility.

Choosing and placing workers – it applies that success or failure o manager's job

expressively relies on availability of suitable co-workers, their number, professionalism and qualification, motivation and loyalty. Also thank to them the manager ensures the fulfilling of organizations' or the units' objectives. The subject of the manager's choice of co-workers and their placing usually includes troubled areas like: Planning, securing the choice and then placing suitable candidates, work classification, advancing and descending, transfer or leaving the organization, improving qualification and reskilling, systems of remuneration, working conditions for employees and staff matters.

Team leading – manager is the leader of the team of workers. He uses his knowledge of leading and motivating people to employ their abilities, knowledge, skills and useful habits and directs their further professional and qualification development. People are considered to be the biggest capital of good organizations. Contemporary management affords to the leading executives wide range of findings, opinions, experiences, methods and attitudes to achieve an active and high quality implication in filling the objectives of the organization or its part.

Check-up - Modern management offers great number of check procedures and fulfillment procedures to realize the check-up process. The manager control's function is an early and economy finding, analysis and accepting conclusions to an inclination, which in a controlled process characterizes a difference between an intention and its realization. The control processes could be structured for example with regard to their content, the control level or with regard to the character of the realization. The last one could be also articulated as regular or irregular, internal or external, preventive, running or consecutive.

Communication is necessary in managerial field. It concerns sharing information which improves communicational processes. Communication could proceed between people but it is intervened by a means of communication technologies. In any case these expressions are covered by the people management in a superior-inferior relationship in army and their leading in the right direction.

In a maintenance field as a part of logistics, is the maintenance management considered.

2. MANAGEMET OF USE AND MAINTENANCE

The objective of use management and maintenance management is to know that the principle of equipments dependability and its good condition can be reached by good treatment- staff management, i.e. management of employees who make sure the equipments is in such conditions they could be safely used.

Definitions, tools and methods fall within scientific problem assessments and therefore in a field of maintenance as well. Of course, everything is about abiding the valid internal normative acts (INA), it is about people's motivation and their remuneration in the conditions they work in. Other motivational attitudes are diverse for example a motivational programs for improvement of working environment, involving the employees in the inner entrepreneurial field or the employees participation in quality courses. Many competent sources are available for further studies of this field [1,2,3].

Analysis is a first parallel manager function. It is a set of procedures and methods which are focused on appropriate and reliable understanding of surveyed features and processes. Considering all five above stated managerial functions, analysis is the first step for their realization, as identification with the conditions of their use and indemnity.

Within the complex of **manager functions the analysis proposes** right understanding of all the sequential functions it infiltrates for realization of the planning process, process of organization, choice and placement of co-workers, team leading and its controlling. Analysis becomes the process of their availability, feasibility, usefulness and efficiency of performance. At the same time it gives the documents for manager functions, i.e. decision making and implementation. The application of analysis needs keeping the rule of *adequacy of research* which predetermines demand for an extent, accuracy and reliability of data which are to be gathered and used. On the contrary an excessive amount of data could

lead to a complication of executed analytical works. The process of analysis is usually bound to a certain conditions. The best known and well-tried is an application of systemic attitude to an analyze - *use of methods of system analysis*. For an application of these methods it is important a purpose and complete understanding of discussed maintenance's problem. For expressing the formulation of a task it is possible to use a *model image* for better understanding. The key expectation is the knowledge of system and a talent to use it at given conditions. The purpose of analysis is to ensure other managerial functions. When doing analysis it is necessary to: contextually define analyzed task which is suppose to be judged; define actual problem-goal of solution, restrictive conditions; determine requirements to a distinctive level of analysis; create suitable model for solution to the analysis'task and to determine its way; to implement required analysis, interpret the results and possibly check them; employ the results of analysis.

Implementation - it represents a conclusion of every successful sequential managerial function and it creates a connection to other functions. The implementation is a process of creative incorporation preceding analytical works and decisions relating to concrete conditions of their application. It concerns adjustments of an output of considered managerial function with regard to a sequence with other functions. An important part of an implementation is a co-coordinative and communication activity. It is recommended to define this concept in advance or define on examples.

Partial conclusion: It is possible to say, this is a very wide topic but actually it is no more than management by commander as head in relation to using and maintenance. It is leading the important part of activity which is maintenance as part of logistics.

3. CHARACTERISTIC OF MAINTENANCE AND COMMANDER'S MANAGEMENT

The maintenance of land military equipment is an activity which lies in a

regularly implemented check of the condition of PVT and in implementation of preventive interventions. It includes activities focused on keeping failure-free condition. The system of maintenance PVT in ACR is carried out by a complex of organizational, economical, ecological, technical and other activities and actions which secure maintenance or renewal of serviceability equipment. Characteristic for the maintenance of PVT in ACR is for example planning, prevention and duration of cycle.

Planning – enables optimal use of space and capacity of logistical structures, it creates time and personal conditions to a well-timed realization of adequate maintenance.

Prevention – expresses the possibility of anticipating the defects and accidents by a well-timed check, adjustment, oiling and elimination of defects.

Duration of cycle – comes from the expectation of appearance of failure due to a length of service, interspaced interval (duration of cycle of individual kinds of maintenance is stated for each kind of equipment in technical descriptions).

Actual maintenance is described as preventive and corrective.

4. CHARACTERISTIC OF INDIVIDUAL KINDS OF MAINTENANCE

Realization of basic kinds of maintenance is subject to all PVT without considering the type of vehicle or the way of its use. Between different sorts of maintenance belong the *check inspection, maintenance after use, basic maintenance and technical maintenance number 1 and 2*:

Check inspection (CI) - The objective is the check of technical condition of the equipment, ensuring its readiness for use, elimination of its defects (eventually fuel supply and ammunition supply). The check inspection is done **before use** (before departure, training, shooting e.g.) **and during the use** - during training breaks. An extent of the check inspection before the use is stated in instructions for maintenance of individual types of equipment. The duration of fulfillment depends on how complicated the

equipment is and how difficult is the task. Usually it doesn't exceed 40 minutes (15 minutes during training breaks). Responsibility for a completeness and quality of work when doing a CI is up to a driver or a squad commander.

Maintenance after use - The aim is to check the technical condition of the equipment, its capability for further use when keeping the rules of safe operating. It is carried out after use of the equipment regardless of number of operation units. The time for maintenance differs for certain kinds of equipment, but usually do not exceed 60 minutes. The commander who was the leader of the training or an officer who was responsible for the equipment answers for the organization, extent and quality of maintenance after use.

Basic maintenance - an objective is a check and treatment of PVT, check and eventual fill of fuel including elimination of defects caused by previous transportation. Basic maintenance on equipment which was in use is carried out twice a month as a part of the equipment's preparation for working in summer or winter term or after a collective return or units from training. Units are given one working day twice a month to carry out a basic maintenance on their equipment with the exception of a month when the particular unit does the preparation of their equipment for a summer or winter period. The works on BM are done by a driver or a squad. The squad leader is responsible for an organization and a quality of the BM. To secure correct basic maintenance is a „command at disposal of the equipment”.

Technical maintenance number 1 and 2 (TM 1,2) - the aim of TM is comprehensive examination of behavior and technical condition of the equipment - systems, apparatuses, machinery, sets, subsets and parts, and comparing with defined technical and service requirements. Eventually there could be supplied and changed grease, fuels, replaced used tools, reserve parts or renewed surface protection.

Technical maintenance is carried out in two stages in time rated by real number of worked working units or at least once a year

when talking about operational equipment, and with short-term stored equipment when reused. For seasonableness, requirement is responsible a unit commander whom was the equipment assigned to. For leading works and their quality is responsible commander of repair unit.

Special kinds of maintenance - Realization of special kinds of maintenance relates to equipment which has to be maintained according to a stated military instructions, original producer's documentation or special treatment is required because of particularity of its use. Special kinds of maintenance a re-preparation of an equipment for use in summer and winter period, maintenance after water overcoming, maintenance after use especially in hard conditions, additional technical maintenance, maintenance during storing and servicing after use of arms.

5. CONCLUSIONS

Reliability of vehicles' operating is an objective of every operator both civil and military. It is especially important in military because there is an effort for the equipment used in missions to work properly. This is a business of commanders/managers responsible for its activity and functionality, therefore it is essential to improve the manager's work. There are mentioned criteria of necessarily provided maintenance.

Regarding prevention there are defined some tasks and responsibility when executing preventive kinds of maintenance which respond to the actual instructions and orders of ACR.

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