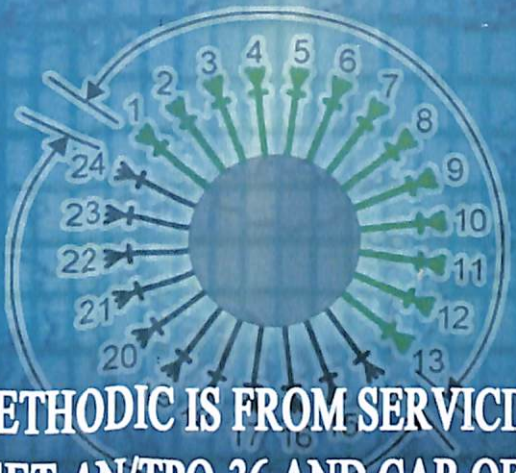
DEPARTMENT OF DEFENSE OF UKRAINE
KHARKIV NATIONAL UNIVERSITY OF AIR FORCE
NAMED AFTER IVAN KOZHEDUB



THE METHODIC IS FROM SERVICING THE RADAR SET AN/TPQ-36 AND CAR OF HMMWV THE CONDITIONS OF OOS

Kharkiv
2020

МІНІСТЕРСТВО ОБОРОНИ УКРАЇНИ
ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ УНІВЕРСИТЕТ
ПОВІТРЯНИХ СИЛ імені ІВАНА КОЖЕДУБА

THE METHODIC IS FROM SERVICING THE RADAR SET AN/TPQ-36 AND CAR OF HMMWV THE CONDITIONS OF OOS

Навчальний посібник

Харків
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Автори: *В. Б. Кононов (ch. 3.3; 3.4); Ю. І. Шевяков (ch. 2); А. М. Науменко (ch. 3,1); Ю. П. Шамаєв (ch. 4); Л. О. Фадєєва (ch.1); В. Ю. Запека (ch.3.2).*

Рецензенти: М. Д. Кошовий, доктор технічних наук; професор; С. І. Кондрашов, доктор технічних наук; професор.

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In a train aid basic information is out about operating descriptions of the radar set of AN/TPQ-36 and car of HMMWV: ds and methods of measurings during servicing

У навчальному посібнику викладаються основні відомості про експлуатаційні характеристики радіолокаційної станції AN/TPQ-36 та автомобіля HMMWV (ХАММЕР); види та методи вимірювань при проведенні технічного обслуговування.

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FREFACE

Therefore, suggested tutorial written in accordance with the new program of discipline of „Basis of metrology and electric measurings" and cjntributes to the training of such specialists.

At the head of the chapters the short data about physical unit to be measured are given. Then there are given the measuring procedures, the design concepts of measurements that implement the measuring procedures according to the kind of measuring value, the limits of its values, the range of operating frequency and necessary accuracy of measurement. To illustrate this the structural flow charts of measuring devices and basic diagrams of some units are given.

Development, manufacturing and operation maintenance of radioelectronic and electronic-calculating means are inevitably connected with the numerous measurements. With that the obtained measurement information is used both for proper measurement and for generating the corresponding signals. It's obvious that the choice of measurement technology in each particular case must provide the realization of necessary quality index of end result.

It's important for the specialist to correctly take the measurement technology, arrange the measuring experiment, process and set out the measurement results as to the cornerstone principles of metrology and acceptability. Productivity enhancement, repair works, test and evaluation are also connected with wide application of different forms and methods of standardization.

INRODUCTION

In modern combat, one of the common means for defining enemy positions is the radar (radar) of the counterattack fight (CBR) [1]. The detection of an enemy's shooting battery is carried out by registering part of the projectile's flight trajectory. Modern systems (CBR) solve this task in automatic mode. The simplest case of the trajectory is the parabola, which is typical for the flight of mortar mines.

In the fire damage to artillery, the key role is given to the accuracy of information about the purpose and speed of determining proofs. As a result, intelligence should provide accurate information about the goal in real-time. Among the well-known means of artillery intelligence is the KSB radar. With the help of modern counter-battery combat stations, which use electronically-controlled chart formation, it is possible to simultaneously detect and track several BOs on the trajectories of their flight simultaneously and predict their breaks and location of firefighting within a few seconds.

In Ukraine, due to a number of reasons, the development and creation of KBB funds was not given enough attention. Artillery reconnaissance radar stations adopted for use with 1RL232 and 1RL239 are operated for over a decade and, according to their tactical and technical characteristics, do not fully meet the requirements of modern combat, mainly due to limited possibilities for identifying targets. Thus, without the modern means of artillery intelligence, it is impossible to ensure the effectiveness of fire damage by artillery weapons, while the competent maintenance of these samples of weapons and military equipment is ensured by a high level of technical training of personnel and sound practical calculations skills in various conditions characteristic of modern combat.

Technical units are part of the main units of regional metrological units and are intended for regulation, ongoing repair (restoration of capacity) of fire control systems, stabilization systems of armaments and special equipment of armored armed and military equipment, as well as special control and control equipment of guided anti-tank missiles military units and institutions of the Armed Forces of Ukraine. Specificity of a certain direction of activity requires the use of both acquired skills and skills, as well as the development of functions that are not specific to specialists of metrological service. Persistence in difficult conditions, high professionalism, technical skills and dedication will continue to help technocrats to restore weapons and military equipment to strengthen the country's defense capability.


Reflected Signal
Transmitted Signal