The main difference between Polish cavalry and the traditional European cavalry of current period lays in preserving its predomination role in Polish military art because of the early transformation of knight cavalry into more effective in 16th-17th centuries Hussar units, however supported in combat by the light cavalry units, or Cossacks. Out of the tactical peculiarities of their types of weapon and defense armour, Hussars used to play the role of the main striking force in Polish Commonwealth's soldierhood, and the Cossack units had an auxiliary functions. The main special feature of Polish cavalry and the Polish military art in the fall of 16th - at the half of 17th centuries may be represented as making supplement between the heavy and the light types of cavalry by simultaneous or alternate using of shooting-iron and cold steel weapon in the mounted attacks. In comparison with common European military tradition, where the main role in battles though played spearmen and later musketeer infantry units, the Polish cavalry, due to its obvious tactical advantages, must have been one of the most fighting efficient troops in European region.

The subject of Polish military history and of the general military history are rather new problems for Ukrainian history science. Under the century-old ideological stress of Russian empire Ukrainian historians did not have the possibilities to broaden their outlook in some fields of history which could have been found dangerous for Russian universally recognized model of history. As a rule, on the background of the acceptance of the Ukrainian lands into Russia the cultural and historical ties between Ukraine and other countries of Eastern Europe region had a strong tendency to be ignored in historical researches. This situation caused the existence of the "white stains" phenomenon in the history science of our country.

In order to present the urgency of chosen topic, I should like to stress that problem of Polish cavalry of 16th-17th centuries is extremely connected with Ukrainian military history of the mentioned historical period. There are two main reasons, which may prove this statement. First of all, we must confess that Ukrainian military art at that time developed in strong connection with Polish military tradition, and, so, it is impossible to have actual suggestions about Cossack troops without understanding of their role in Polish Commonwealth's military system. The second reason, is that Polish cavalry, as the main attack force in Polish troops, was the main tactical enemy of Cossack rebels during the famous Ukrainian rebellions in the fall of 16th and all the 17th centuries. So, it is obvious, that achieving an objective point of view on the combat values of Ukrainian Cossacks may be allowable only in consequence of unprejudiced comparison of them with an enemy soldiers. In other words, conscientious research of current topic makes deeper our knowledge about our own history and those proceedings which caused some epoch-marking results in our national past.

Of course, the requirements of current article does not allow us to enlighten the chosen problem completely. Our aim is to analyze the background of Polish cavalry, understand its role in the military system of Polish Commonwealth, define its special features, and show the tactical application in combat. The main base for this article are the corpus "The history of soldiership in Poland" (published in Russian) [1] and the works of the famous Polish military historian Konstantine Gurski [2], where can find a great amount of useful archive documents. Although there are no special researches in
Ukrainian historiography, which are directly dedicated to the problem of the peculiarities of Polish cavalry, still some helpful information were found in the works of Ukrainian historians I.Krypyakevych, I.Sveshnikov, V.Serhiychuk, I.Storozhenko, et alias [3].

The 16th century in European military art was the distinct boundary line between the Middle Ages period and the New Ages. It was marked by the process of total crisis of the application of heavy knight cavalry on the battlefield and raising of the role of hired infantry. The main cause for these changes was the widespread of firearms and gradual improvements of its combat capability. So, there was no more sense of using heavy knight armour. Besides that, the obsolete system of mobilization and forming of the knight troops, based on the principle of feudal obligation, in the 16th century was completely eliminated. That is why, the tactical role of heavy cavalry and its amount in the troops during the European wars of that time were noticeably reduced as well as its tactical type had been principally changed from lance-knight cavalry to mounted gunners.

However, not in all the European regions this tendency proceeded in the same way. Like every western influence, this fashion in military art gained some peculiarities by spreading into the east of Europe. The special features of Polish cavalry of 16th-17th centuries allow to emphasize the distinction of Polish Commonwealth’s soldiership. According to the conviction of the most of Polish historians who investigated this problem [4], Polish cavalry had never lost its leading position in Polish soldiership because of the early transformation of knight cavalry into heavy Hussar units. In order to support their attack by the guns and bows, the process of joining the subunits of light cavalry to Hussar formations took place. In fact, infantry had never played appreciable role in Polish soldiership until the half of 17th century. It was the consequence of Polish military traditions and the peculiarities of Polish infantry, which traditionally gravitated towards using of gunner weapon instead of cold steel weapon for distant fighting, and so in the term of mentioned historical time such kind of infantry was an excellent target for hostile cavalry and pikencers.

The significance of cavalry and infantry in Polish soldiership can be revealed on the examples of correlation between these two combat arms in the next Polish campaigns: near Orsha there was 16.000 of cavalry (both heavy and light) and only 4.000 of infantry; near Obertin were 4.529 of cavalry and 1.500 of infantry [5]. Though we must mentioned that there were two exceptions from the common statistics when the number of infantry during campaign exceeded over the number of cavalry. I mean the Hotin campaign of 1621 and the Smolensk campaign of 1633-34. These exceptions can be explained by the peculiarities of both campaigns which demands conducting of siege and fortification works, but, in general, the main character of the all Polish campaigns in the reviewed period was aspiration for solving the battle fate only by the cavalry units. Infantry tended to be used for the defense of wagon trains and as the covering force in the back of the battle arrays.

Besides the strong knight traditions in the mentality of Polish elite, the supremacy of cavalry in its tactical role was also conditioned by the mobile character of the hostile Tatar troops. In fact, the effective offense against them could have been fulfilled only by the cavalry, which was able to have equal mobility, and exceeded the Tatars by the striking force and gun power. The permanent conflicts with Tatar troops, which became more urgent during the 15th and 16th centuries thereby the formation of Crimean Khanat and the Polish expansion over Ukrainian lands, allowed Polish military art to obtain a great experience in dealing with Tatar cavalry. From the half of 16th century we can trace the development of Polish military doctrine, based on the principle of domination of cavalry and its division into heavy and light cavalry units for the purpose of combination and mutual support of both kinds of cold steel arms and shooting-iron weapons [6]. This is the main define feature of Polish military art of 16th and 17th centuries.

Besides the high-priority role of the cavalry in Polish Commonwealth’s military art, I should like to emphasize on the tactical peculiarities of heavy and light types of Polish cavalry, more known as Hussar and Cossack units.
The history of Hussar units in Polish troops begins from the early 16th century and actually connected with obvious Hungarian influence. In that time Polish registry documents contain a lot of information about the hired Hungarian cavalry units which carried military service in Polish troops. In comparison with traditional Polish knight cavalry of that time, the Hungarian Hussars despite of being the heavy type of cavalry too, though had more simplified armour [7]. That is why, they were more useful for the combat with Tatars because the last ones did not have the heavy cavalry at all and effectively used their advantage of high mobility. During the 16th century Polish elite cavalry completely turned into Hungarian Hussar type, which was the beginning of famous Polish Hussar tradition in Polish military history of Modern Age.

According to the first known description of Polish Hussars (Starovolski Eques Polonus. 1628.) [8], their armour consisted of the next compounds: simplified iron cuirass (the type of chain mail), the helmet of the famous Polish type known as "shishak", iron oversleeves, and sometimes the characteristic two large feather wings on the back. The basic weapon of Polish Hussar was the large (near 3.5 meters) spear, the supplementary weapons were curved sabre, so-called "Polish and Hungarian type", large sword well-known as "koncerzh", and one or two pistols. The last two kinds of weapon used to be fixed to the horse saddle, instead of sabre, which was always worn near the left side of body. Although not all the Hussars had the equal military status. The question at issue is that Hussars units (in Polish military terminology "horugva") had the traditional medieval principle of completing, based on the vassal subordination. The manpower of "horugva" was formed by two categories of fighters, known as "tovaryshy" ("comrades") and "sherengovi" or "pochtovi tovaryshy" ("rankers" or "retinue comrades"). "Comrades" executed the role of junior officers: they personally hired "retinue comrades" and led that organization item, which formed the one row in the battle-array of "horugva".

It is hard to define the constant quantity of "comrades" and "retinue comrades" in Polish Hussar units. Obviously, it depended on hired nature of Polish troops and so the quantity was frequently stipulated by the personal financial opportunities of "comrades". Analyzing the available information about the correlation of both types of fighters, we can draw the significant number of 3-5 "rankers" to 1 "comrade". For instance, according to registers, the Hussar unit of Potocki in 1550 had 28 "comrades" and 106 "retinue comrades"; unit of Zebrzhidowski in 1589 had 40 "comrades" and 187 "retinue comrades" [9]. During the 17th century in Polish soldiership took place the tendency for reducing the number of "rankers" to 3 fighters. So, the "artikul" of Polish hetman Stanislaw Konopolski in 1643 prohibited to hire more than three "rankers" in one "retinue" [10]. That is why, the total number of fighters in Hussar unit during 17th century, as a rule, counted 100-120 riders.

Instead of division on two subordination type, the Hussar units preserved their general elite status. Being the main striking force in Polish troops, Hussars, as a rule, had never been used in mounting patrol for the tactical reconnaissance and for the defense of wagon camp. These duties were in a competence of light cavalry.

As we had already mentioned, light cavalry in Polish soldiership was assigned for auxiliary role. It was conditioned by typical foreign origin of these fighters and also by the peculiarity of their weapon. Actually, Polish nobles used to regard that only military service in Hussar units was worthy of their high-born origin, that is why service in light cavalry was reserved mainly for local Ukrainian nobles and for temporary hired Tatar and Voloh cavalry units. I must admit that there are no single term in Polish military history for the meaning of light cavalry. For example, Tatar and Voloh units had the term "Tatar and Voloh horugvy"; units which formed from the ethnic Ukrainian lands tended to be called "kozacki horugvy" or "pan-cyrni horugvy" from the half of 17th century [11]. The first references about "kozacki horugvy" we found in the middle of 16th century. The principle of their forming was the same as in Hussar units, namely, there were also some "comrades" who had hired "rankers" [12] but these "comrades" were mostly local nobles from the western Ukrainian lands: Galychina,
Volyn’, Podillia [13]. The origin of Cossack cavalry in Polish troops can be clearly traced from the typical for Polish soldieryship medieval mounted archers, which also carried the same auxiliary role for the knight units. The term “Cossack” came from Turkic languages where it was indicated in common meaning the type of lightly armoured rider. Ukrainian historian Yavornycki, for example, presents the notifications of the 15th century about the Tatar Cossacks from Bilgorod, Perekop and Azov [14]. Very similar was also the weapon of Tatar cavalry and the Cossack units of Polish troops. For example, as sources say, Tatars did not use any armour, their weapon consisted of bow, curve sabre, dagger, and sometimes the short spear [15]. The same information about Cossack units we can find in the documents of the end of the 16th century: “They (Cossacks) are armoured very lightly, almost like Tatars. Their horses are very mobile and able for the small clashes. Their saddle are good for simple turning in all the sides and shooting from the bow. In combat they usually use a bow, hitting the enemy riders by the clouds of arrows. They also use sabres of the eastern types and the short spears” [16].

In general, according to available material, it is rather hard to define the typical variant of light armoured Cossack rider in Polish troops. Some sources of the 17th century describe them in lighted chain armour with typical “misiurka” helmet and with “one large and two short shooting-iron weapons” in spite of bows [17]. Obviously, we must admit that there were no single established standards for the light cavalry and they were modified with a time and development of shooting-iron weapon. In my view, from all the existing descriptions we should select two the most typical examples of light cavalry weapon - the short spear (in Polish military terminology “rogatyua”) and short cavalry types of guns. There are no contradiction between using both of these weapons at the same time. “Rogatyua” had to be short (near 2 metres) because of necessity to be hold vertically by the cord behind the rider’s back in order to free his right hand for making a shot. At the same time, we must remember that because of the peculiarity of ignite mechanism it was impossible for mounted shooter to reload the gun during the attack and so he had to return behind the battle-arrays for reloading it or to develop attack with a short spear. The auxiliary character of Cossack light cavalry was caused by that tactical peculiarity. In other word, this type of cavalry could have been used effectively only against enemy units who did not have large spears, for example, against mounted or unmounted shooters. As the sources say: “Hussar spear must be 8,5 cubits long (near 3,91 metres)... It is good against German spearmen, Hungarian Hussar, Turkish spearmen... Rogatyua is good against German reytars, unmounted Cossacks, mounted Tatars because of its light weight... It must be 5 cubits long (near 2,3 metres).” [18]

At the same time, the co-operation between Hussar and Cossack units in combat considerably increased the total striking force of their attacks and it was the defining character of Polish cavalry tactics. From the 16th century we have the references about the arrangement of Polish battle-arrays [19]. Out of this information we can indicate the typical place for Hussar units in the middle part of battle-array, and the common place for Cossacks was on the flanks, behind or between Hussars' units. The Polish cavalry tactics meant the consecutive alternation of Cossack and Hussar attacks, based on the possibility to rescue one's failed attack or to develop its success [20]. Besides that, using of shooting-iron weapon was able to disorganise the enemy battle-arrays and so to simplify the attack of Hussars. The classical example of such co-operation and consecutive alternation of Hussar and Cossack units was the battle near Klushino in 1610 where Polish cavalry had made 10 continuous attacks against Russian positions and finally gained the victory.

From the beginning of 17th century the significance of using the Cossack units in Polish troops had being constantly increased. For instance, in the first Smolensk campaign of 1609-1611 took part 1.900 Hussars and only 600 mounted Cossacks [21]; during the second Smolensk campaign of 1633-1634 there were 1.540 Hussars and already 2.550 mounted Cossacks; and near Berestechko in 1651 against the troops of Bohdan Khmelnicki fought 2.346 Hussars and 11.161 mounted Cossacks. Such kind of changes in correlation between these two types
of Polish cavalry could be explained by total increase of the role of shooting-iron weapon in combat. Besides that, obviously, using a greater number of mounted shooters should have been done the possibility to provide the Hussars attacks no less effectively.

Summarising of all the cited material about Polish cavalry of the fall of 16th - the first half of 17th centuries, we came to the next statements:

• special features of Polish cavalry in given historical period consisted in preserving of its general predomination role in Polish troops as distinct from the western tendency of raising the infantry role in military art;

• Polish cavalry mostly preserved its elite gathering and the special principle of forming the units, based on the division on "comrades" and "rankers";

• there were two main types of mounted units in Polish cavalry. The Hussar units belonged to the type of heavy cavalry, which were the main striking force in Polish troops. All the kinds of light cavalry units, which, as a rule, had non-polish origin, played an auxiliary role;

• an effective co-operation between the heavy and the light types of cavalry was an essential part of Polish cavalry tactics. The central idea of this co-operation was to make supplement to each other by the simultaneous or alternate using of shooting-iron and cold steel weapon in the mounted attacks.

Out of current statements we can formulate the next conclusion: the historical period from the fall of 16th till the middle of 17th century was the time of the enhancement of the Polish cavalry and its adjustment to the new terms of waging the war in Early Modern Ages. The special features of Polish soldiership in given period allow to confirm that, due to peculiarities of Polish cavalry and its tactical role, the Polish troops must have been one of the most fighting efficient troops in Eastern Europe region.

1. История военного дела в Польше. - Варшава, 1970.
8. Ibid. - S. 63-67.
9. Ibid. - S. 25-34.
10. Ibid. - S. 72.
12. Там само.
Прищепа Я.О.

ОСОБЛИВОСТІ ПОЛЬСЬКОЇ КІННОТИ КІНЦЯ XVI - ПЕРШОЇ ПОЛОВИНИ XVII СТ.

На відміну від поширеної тодішньої європейської військової практики, характерною особливістю польської кавалерії означеної періоду було збереження її панівного значення у військовій справі. Це пояснюється досить ранньою трансформацією важкої рицарської кінноти у більш ефективну для військових реалій XVI-XVII століть гусарську кінноту, ефективність застосування якої, однак, додатково підвищувалася долученням підрозділів легкої (козацької) кінноти. Виходячи з особливостей їхнього озброєння та захисного обладунку, гусари відігрівали у війську Речі Посполитої роль головної ударної сили, в той час як всім видам легкої кінноти відводилася виразно допоміжна роль. До визначальних рис польської кавалерії кінця XVI - першої половини XVII століть можна віднести також возведену в ранг військової теорії практику забезпечення тактичної взаємодії між важкою і легкою кіннотою, покликану максимально підвищити ефективність використання тактико-технічних можливостей кожного з них. Вона була одним з найефективніших ударних типів військ у Європі.