

More on Nikola Tesla

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In the previous issue of PCP (Summer 2007, pp 140-148), Dr. Foil A. Miller published an excellent article on the subject of NIKOLA TESLA, including his biography, pictures of stamps honoring the scientist, comments on some stamps, and identification of stamps and references.

Dr. Miller identified a total of 29 items (among stamps and souvenir sheets) featuring Nikola Tesla, his discoveries, and his inventions. The identification of those stamps and souvenir sheets was made through a tabular summary where the items were listed chronologically, including country, date of issue (year-month-day), denomination (face value), Scott catalogue number and subject. As far as I know that table is the first such checklist on Nikola Tesla.

The 150th anniversary of Tesla's birth was commemorated on 10 July 2006. Six different countries in Southeastern Europe, close to Nikola's birth place, issued several philatelic items, including stamps, souvenir sheets, booklets, maximum cards and First Day Covers (FDCs) to honor the electrical inventor: Bosnia & Herzegovina (Croat Administration), Bosnia & Herzegovina (Serb Administration), Croatia, Georgia, Macedonia and Serbia & Montenegro.

By the end of 2006 I became fascinated to this topic due to this huge number of philatelic items related to the noted physicist. Then I decided to do some research on Tesla's life and inventions. Now I would like to share the results of this endeavor with readers of *PCP*, trying to answer some questions asked by Dr. Miller in his great article and presenting new insights into some of the 29 stamps issued until now to honor Nikola Tesla.

1. Stamps issued by the Republic of Krajina

In 1991 Croatia declared its independence. Then a civil war between ethnic Serbs and Croats ensued until 1995. Initially, the Serbs, with Yugoslav support, controlled about one-third of the country, declaring their territory as the Republic of Krajina. By 1995, the Croatian government had recaptured almost all of the Serb-held areas. Krajina issued its own stamps from 1993 till 1997. However, stamps from the Republic of Krajina are not listed in the Scott catalogue since this region did not achieve international recognition and its stamps were not recognized by the UPU (Universal Postal Union). On the other hand, both the Michel and Yvert et Tellier catalogues do register the stamps from Krajina. In his paper Dr. Miller identified one stamp from the Republic of Krajina (stamp [16]) featuring Nikola Tesla's portrait. It was issued on 10 July 1996 to commemorate the 140th birth anniversary of Nikola Tesla.

The mentioned item belongs to a souvenir sheet of eight stamps. Herein, the souvenir sheet with imperforated stamps is shown in Figure 1. In the intersection of the middle row with the middle column there is a label (not a stamp) that reproduces the Tesla coil (also called "magnifying transmitter") that generates electrical discharges, much like stamp [8] in Dr. Miller's paper. This stamp appear in the Michel catalogue as #58 and in the Yvert et Tellier catalogue as #55.

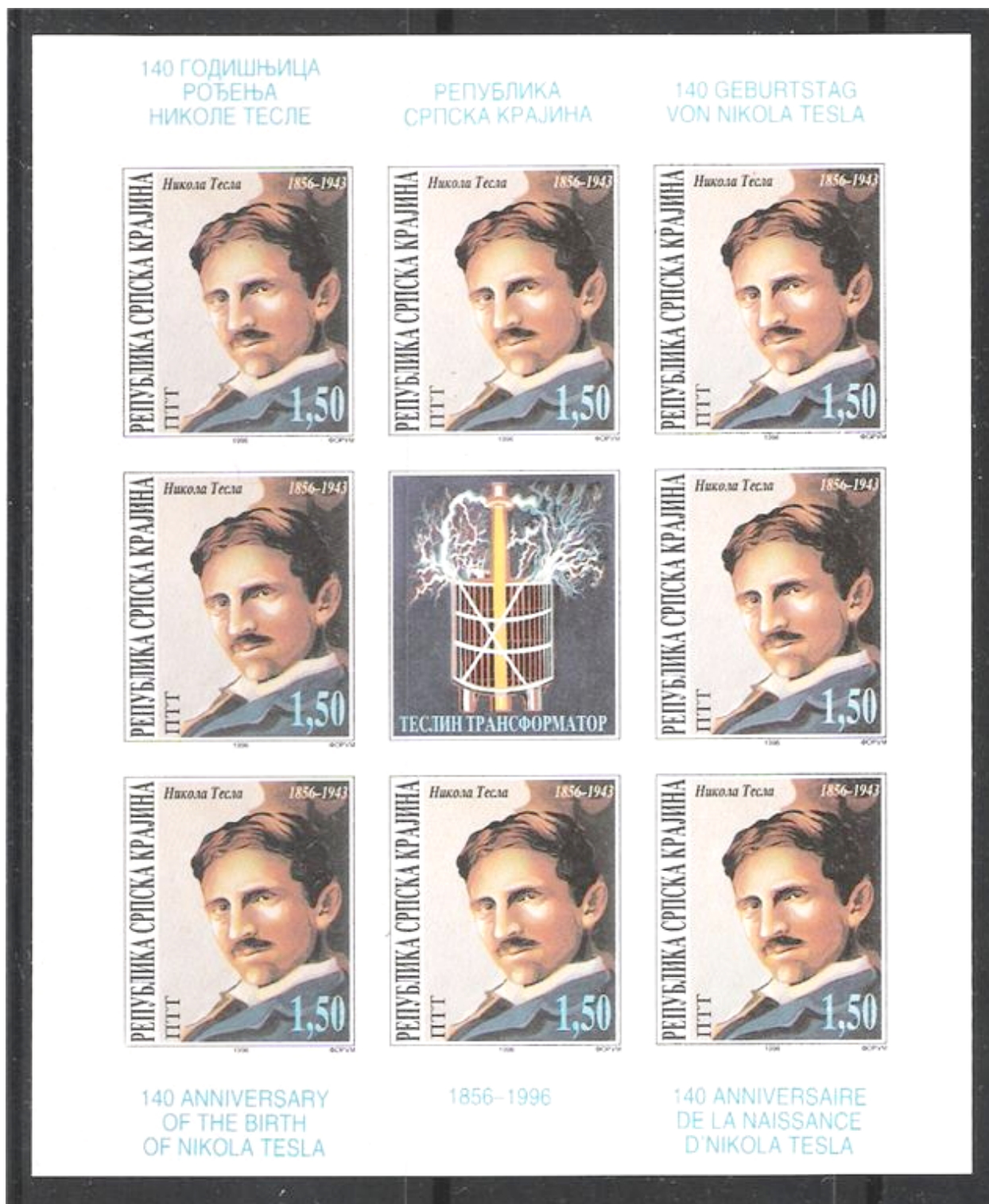


Figure 1. Nikola Tesla imperforate souvenir sheet from the Republic of Krajina.

2. Tesla's eccentricities and the light bulb

As he got older, Nikola became more and more eccentric. Tesla was a demanding dresser: he wore a new tie daily and new gloves weekly. Some writers say that he was fascinated by number 3 and numbers divisible by 3: he used to walk around a block three times before entering a building, he always asked for three folded cloth napkins beside his plate during a meal, etc. For the last ten years of his life he lived in The New Yorker Hotel (in the city of New York), on the 33rd floor ($33 = 3 \times 11$), room # 3327 ($3327 = 3 \times 1109$)!

Would Tesla have chosen the value of 60 Hz for the operating frequency of his devices (induction motor, AC generator, etc.) due to his fascination by number 3? Or it was just a big coincidence? Remember that $60 = 3 \times 20$!

In his paper Dr. Miller identified two stamps issued by Ghana on 1st September 1998: stamps [17] and [18], with Scott catalogue numbers 2062c and 2062d, respectively. They form a se-tenant pair and belong to a sheet of eight stamps (four se-tenant pairs) named "Twentieth Century Inventors and their Inventions".

Here the Tesla related pair is shown in Figure 2. Whereas the stamp on the left shows Tesla's coil generating huge electrical discharges, the stamp on the right shows Tesla's portrait inside an incandescent bulb and also a number 3 in red, at the left lower corner, just to symbolize one of Nikola's many eccentricities.

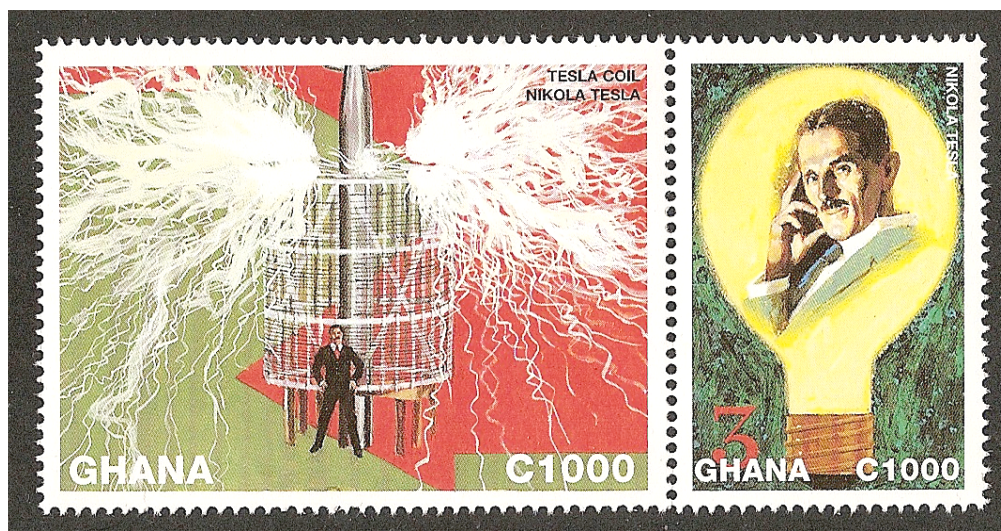


Figure 2. Nikola Tesla stamps from Ghana.

Even though Tesla did not invent the incandescent lamp (Thomas Alva Edison did it on 21st October 1879), he developed while working at Westinghouse Electric Company, among other devices, a system of high-intensity arc lights for use in lighting streets and factories. He also developed the first practical phosphorescent lamps (the precursors to fluorescent lamps). Perhaps those are the reasons why the Postal Administration of Ghana decided to issue the stamp where Nikola's portrait appears inside a light bulb.

3. Tesla and the telephone

The telephone was invented on 10 March 1876 by Alexander Graham Bell. At that time Tesla was still a student and did not reach the age of 20 yet. From 1875 to 1878 he was at the Polytechnic Institute of Graz (near Vienna, Austria) studying electrical engineering.

Nikola began his career as an electrical engineer in 1881 working for several European companies. His first job in the industry was at the Central Telegraph Office of the Hungarian Government in Budapest (Hungary), where he was in charge of the city's first telephone exchange. He made several improvements in the Central Station apparatus and perfected a telephone repeater (or amplifier) that was never patented. All of that was some five years after the invention of Bell's device.

Maybe those are the reasons why Nikola Tesla is associated with the invention of the telephone in stamp [20] included in Dr. Miller's article and registered by Scott catalogue as # 2502e. It belongs to a booklet of six plus a souvenir sheet named Millennium III and issued by Yugoslavia on 2nd November 2000. Here the booklet is shown as Figure 3 to the right.

Figure 3. Nikola Tesla booklet from Yugoslavia.



On the back of the booklet there is a description for the issue, which says in part:

“MEETING THE III MILLENNIUM – as well as majority of Postal Administrations all over the world, the Community of Yugoslav PTT has included in its program for 2000 the issue dedicated to the forthcoming III Millennium. This issue contains a booklet of six special postage stamps and a souvenir sheet. The motives on the stamp and on the souvenir sheet represent the important discoveries, achievements and events that have marked the III Millennium and had the great influence on the further development of the humanity. Stamp no. 5: our great scientist and inventor Nikola Tesla, telegraph and telephone.”

This booklet, on the left side, has two rows of three stamps each. Tesla’s stamp is the second, from left to right, on the lower row. It depicts two men working on a laboratory bench with (maybe) telegraph and telephone apparatus, and Nikola’s portrait on the left. The face value of this stamp is 12d.

4. Stamps issue by Serbia and Montenegro

The State Union of Serbia & Montenegro, two former republics of Yugoslavia, existed between 2003 and 2006. It was a union of Serbia (capital: Belgrade) and Montenegro (capital: Podgorica). After a referendum on independence held on 21st May 2006, there was a formal declaration of Montenegro on 3rd June 2006. Serbia officially accepted the independence on 7 June 2006, and the union was ended.

On 26 May 2006 Serbia & Montenegro issued many items featuring Nikola Tesla and his apparatus to celebrate the 150th anniversary of the birth of the scientist. One of those issues was a set of two stamps, illustrated here in Figure 4 below.



Figure 4. Nikola Tesla stamps from Serbia and Montenegro.

The stamp on the left (Scott #342), with face value of 16.50 d (20 c) displays Nikola Tesla's portrait with electrical discharges in the background. It was not shown in Dr. Miller's paper. The stamp on the right (Scott #343) has a face value of 46.00 d (50 c) and depicts Nikola Tesla's portrait together with one of his first inventions. Scott catalogue says that it is an electrical generator, but this is wrong: it is the AC induction motor, shown in stamp [7] in Dr. Miller's paper). This second stamp appears in Mr. Miller's article as stamp [23]. A booklet issued in the same date, but not shown here, contains ten sets of stamps.

The same set also appears on a FDC (Figure 5). The envelope has, on the left, the portrait of Nikola Tesla (among a few clouds) and the equation: $T = \text{Wb}/\text{m}^2$. On the occasion of the “Conférence Générale des Poids et Mesures”, held in Paris in 1960, the great scientist was honored with the international unit to measure the magnetic flux density. This unit, called “tesla” (symbol: T), equals to one Weber per square meter, i.e., $T = \text{Wb}/\text{m}^2$.



Figure 5. Nikola Tesla FDC from Serbia and Montenegro.

5. References

(a) World Stamp Almanac. LINN'S STAMP NEWS. Amos Press. Sidney, OH, USA. 6th edition, 2000 (Millennium edition). ISBN: 0-9404043-85-4.

(b) Tesla: Man out of time. MARGARET CHENEY. Touchstone, USA. 1st edition, 2001. ISBN: 978-0743215367.

(c) Wizard – The life and times of Nikola Tesla – Biography of a genius. MARC SEIFER. Citadel Press Book, USA. 1st edition, 2001. ISBN: 978-0806519609.

(d) WIKIPEDIA, The Free Encyclopedia – info about Serbia & Montenegro available at: http://en.wikipedia.org/wiki/Serbia_and_Montenegro

(e) Nikola Tesla's autobiography – info available at: <http://amasci.com/tesla/biog.txt>

