Leonardo da Vinci’s Rapid-Fire Crossbow
An implement that could have changed the course of history

A research project by the Leonardo3 Research Center in partnership with the San Marino Federation of Crossbowmen
Supported by the City of Milan, Office for the Promotion of Culture
Supported by San Marino Republic, Secretariat of State for Tourism

Milan, June 24, 2015. The Leonardo3 Research Center is proud to present, for the first time ever, the unprecedented, perfectly optimized and functioning model of Leonardo da Vinci’s Rapid-Fire Crossbow. Designed on folios 143, 153 and 155 of the Codex Atlanticus, the implement was studied in depth by Leonardo3’s Edoardo Zanon, who in 2013 presented an initial prototype at the exhibit The World of Leonardo in San Marino. That occasion led to the partnership between Leonardo3 and the San Marino Federation of Crossbowmen, which in turn led to the construction of a perfectly functioning model by virtuoso crossbowman Danilo Giovannini, for the first time in history since the time of Leonardo.

This initiative, along with many others dedicated to Leonardo da Vinci, is part of ExpoinCittà, a project supported by the City of Milan and the Milan Chamber of Commerce, which brings together over 23 thousand events throughout the Universal Exposition in its program schedule and presents a day-by-day account in real time of everything happening in the city through its app, website, social networks and blog, in six languages.

The project required careful, painstaking study of Leonardo’s design and the implement was created by fully respecting the working and assembly techniques that would have been available during Leonardo’s time. The results are of worldwide importance considering that the Rapid-Fire Crossbow is one of the few unprecedented designs by Leonardo that actually functions perfectly. Not only does the model allow one to fire with great precision and power, but it also has a rapid-load mechanism, which not even traditional modern crossbows have. This innovative loading system, which requires no outside devices to load the bow, allows darts to be shot at twice or triple the speed of common crossbows. In the case of the Rapid-Fire Crossbow’s design, Leonardo da Vinci did more than just study and improve on...
what was available in his day; he actually produced a full-blown invention. Had it ever actually been made, it could even have changed battlefield strategy and consequently the course of history.

This reconstruction therefore shows that it is still possible to discover unprecedented designs by Leonardo da Vinci that are of fundamental historical importance. Making discoveries like this is the purpose of the Leonardo3 Research Center, which over the last ten years has been dedicated to studying and popularizing the works of Leonardo da Vinci.

The Rapid-Fire Crossbow will be presented for the very first time on June 24 at 11:00am, exclusively for the press, at the moat in front of Sforza Castle in Milan. The presentation will be made by the City Councilor for Culture of Milan, Filippo Del Corno, Leonardo3 and the San Marino Federation of Crossbowmen. The use of a traditional crossbow will be demonstrated alongside that of Leonardo’s implement, which perhaps for the first time in history will fire its first dart.

It will then go on public display starting Saturday, June 27 as part of the exhibit Leonardo3 – The World of Leonardo, in Piazza della Scala, Galleria entrance, in Milan, which will soon reach 400 thousand visitors and represents one of the most important cultural offerings within the realm of Expo 2015.

Leonardo3 – with headquarters in Milan – is a research center and media company (study center and laboratory; exhibit and museum production; publishing, television and multimedia products; publishing company) whose mission is to study and interpret cultural heritage and share it with the public using the latest methods and technologies developed in house. All the Leonardo3 research laboratories and products (physical and 3D models, books, multimedia support, documentaries, exhibits and museums) are dedicated to the work of Leonardo da Vinci. Leonardo3 designed and produced Leonardo3 – The World of Leonardo being held in the “Sale del Re” in Piazza della Scala in Milan until October 31, 2015. The support of the City of Milan and the Premio di Rappresentanza awarded by the President of the Italian Republic attest to the originality and prestige of the show’s contents.

The San Marino Federation of Crossbowmen, founded in 1956, keeps alive the tradition of defending the homeland on the part of crossbowmen, who in the past were entrusted with protecting the city walls and the freedom of the Republic of San Marino. The Federation also organizes the traditional “Palio delle Balestre Grandi” (“Great Crossbow Competition”) that takes place each September 3 – a festival dedicated to its founding saint. The competition was established with the twofold intent of honoring St. Marino and allowing the crossbowmen, who compete with each other, to keep their weapons in a state of perfect working order. The tradition continues to this day, and the Palio is enriched with the presence of actors, musicians and flag-bearers who accompany the crossbow-firing show. The San Marino Federation of Crossbowmen has performed in the major city squares of Italy and the world, including a recent show to mark the National Day of the Republic of San Marino at Expo Milan 2015.

Danilo Giovannini, artisan and proud member of the San Marino Federation of Crossbowmen, “Crossbow King” in 2013 – Italian champion in firing the ancient, Italian-style bench crossbow at the National Crossbow Federation Tournament – is passionately devoted to the study and reproduction of ancient crossbows.
Leonardo3 – The World of Leonardo
Milan, Piazza della Scala (at the entrance of Galleria)
Ends October 31, 2015
Open daily, 10am-11pm
www.leonardo3.net
With patronage of Comune di Milano
Award of Excellence from the President of Italian Republic

Info:
Leonardo3 - Il Mondo di Leonardo
tel. 02-87239773
www.leonardo3.net
museum@leonardo3.net

Guided tours and groups:
Ad Artem
tel. 02-6597728
www.adartem.it
info@adartem.it

Leonardo3 Press Office
Francesca Gobbo
tel. 346.3032496
press@leonardo3.net

Media relations Le Sale del Re
Elisa Dal Bosco
tel. 349.6187963
elisa.dalbosco@arosogroup.com

Rapid-Fire Crossbow images are available on:
http://leonardo3.net/leonardo/immagini_eng.htm