



200TH ANNIVERSARY
OF THE
HAMILTON – BURR DUEL
AT
WEEHAWKEN

1804 ~ 2004

An Investigation into the
Location of the Weehawken
Duelling Ground

by
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January, 2004

a publication of

The Weehawken
Historical Commission

Duel2004.weehawkenhistory.org

Introduction

The exact location of the Weehawken Dueling Ground is a matter of mystery and controversy, complicated by the many changes along the Hudson riverfront since 1804.

This document was prepared and presented to the Weehawken Historical Commission in January, 2004 by Thomas R. Flagg, an Industrial Archaeologist from New York City who has done extensive research regarding the changing face of New York Harbor. Mr. Flagg's past work has included the preparation of historical preservation reports regarding the West Shore Railroad Tunnel and the Weehawken piers.

Mr. Flagg has generously allowed the Commission to publish his work as part of the commemoration of the bicentennial of the Hamilton-Burr Duel.

The opinions expressed in this document are those of the author, who may be contacted at:

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As an industrial archeologist who has previously worked on the shorefront of Weehawken, I have already done some of the research needed to turn up sources of information on the Duel Ground, and am able to provide the Committee with this report on them. During the time when duels were occurring at the site, from 1795 to 1845, their location was fairly common knowledge, and therefore it should be possible to find sufficiently explicit descriptions in the literature. Walter Eickmann says in his 1948 *History of West New York New Jersey* (and it is still true today) that tourists are led to believe the site was on top of the cliff, when they see the bust of Alexander Hamilton there, resting on the alleged boulder from the site (dragged up here many years ago), and it is necessary to counteract that impression.

A report that includes this topic was done for official purposes not long ago by a well-known historic archaeologist, under contract to an agency of the State of New Jersey. New Jersey Transit is currently extending the Hudson-Bergen Light Rail through Weehawken. Large government projects such as this require the preparation of an Environmental Impact Statement (EIS) before construction starts. An important part of such reports is an analysis of the impact of the project on nearby historically significant structures and sites. The preparation of these sections is generally subcontracted to specialist archaeologists and historians. In this case the work was done by Joan H. Geismar, PhD, an experienced and well known urban archaeologist who has done this type of work for many projects in the New York, New England and North Jersey region. Her report was entitled "Jersey City to the Vince Lombardi Park-Ride Archaeological Study for the Hudson-Bergen Light Rail System". It was submitted to NJ Transit April 30, 1995, and became part of the official EIS for the project. Copies of the report were placed in the Jersey City Public Library and other places for consultation by the public. After discussing Weehawken's early history and some later development along the waterfront, Dr. Geismar stated on p. 92:

"While shoreline reclamation and railroad construction were noteworthy, Weehawken is perhaps best known for its infamous Duel Ground. It was here that Aaron Burr shot Alexander Hamilton in 1804; Hamilton died in Manhattan the next day (Stokes V, 1926, p.1425). The Duel Ground was a natural ledge, 6 ft. wide by 11 paces long, that was located near the base of the Palisades and accessible only from the Hudson (Winfield, 1874, p.201)."

She concludes that this ledge lay within or close to the H-BLRT (Light Rail) alignment, which is on the same alignment as that of the original railroad here (the New York and Fort Lee, which later became part of the New York Central and then Conrail). Dr. Geismar added notations to a historic map, to show the location of various historic sites on or near the light rail future alignment, and the map includes the duel site (indicated by the northernmost circle).

One source quoted by Geismar was Winfield's 1874 history. This is the primary 19th century history of Hudson County, and is referred to by almost every historian since then. Winfield devotes over 30 pages to the topic of the Duel Ground. He says about the site that "the rocks here rise almost perpendicularly to 150 ft. above the water" and that the site was under these heights, about 20 ft. above the water, on a grassy shelf about 6 ft. wide and 11 paces long, reached by an almost inaccessible flight of steps. There was no path leading to the spot along the river or from the heights. Thus the site was at a place where the cliffs rise up not far the water. Winfield states that the cedar tree that shaded the site had been removed only four years previously to his book, when the railroad built through the site. It is obvious from his description, and from the way he expresses his regret about the destruction of this very important site, that Winfield had been there himself. Thus even though the Winfield history appeared 70 years after the event, there is a definite connection to certain characteristics of the site that remained through the years.

Winfield devotes many additional pages of text to details of the numerous other duels fought at the same site, right up until the last one in 1845, including the personalities involved and the issues that led to the duels. It is clear that this site and the history connected with it are of far more than local interest. Aside from the national significance of the Hamilton-Burr duel, many other duels there involved important persons, such as Oliver Hazard Perry and De Witt Clinton. Winfield himself calls the Duel Ground "Perhaps the most interesting spot in the County of Hudson".

I have turned up an additional source that did not appear in Dr. Geismar's report. The first full-length biography of Aaron Burr was published in 1858, written by J. Parton, called *The Life and Times of Aaron Burr*. This author provided an objective account of Burr, not demonizing him but also not idolizing him. Parton based his work not only on documents but also on conversations with many people still living who had known Burr personally. His account of the setting of the duel was based partly on one or more actual visits by him, before the narrow road that preceded the railroad had yet been built through it. I enclose a photocopy of the most relevant pages (353-355) from the book.

According to Parton, the site was located directly under the heights of Weehawken, which rise to an elevation of one hundred and fifty feet above the Hudson. Under these heights, at a point a half mile upstream from where they begin (in other words, the south face of Kings Bluff), there was a small grassy ledge, 20 ft. above the water, six feet wide, and 11 paces long. Nowhere does he say that this ledge was oriented in any particular direction, nor do any other of the authorities. Parton goes on to say that at the time he wrote, it was almost unchanged since July 1804, aside from some additional underbrush and some markings on the rocks put there by visitors: in particular he mentions the cedar tree and the large rocks which partly hemmed in the place. At the time he visited the site, it was still inaccessible to people on foot along the river, requiring that it be reached by boat.

Since the orientation of the dueling ground may be of interest, we can attempt to deduce it from other factors, but in fact they are contradictory. On p.354, Parton notes that Hamilton's second (perhaps in error) chose a position at the "upper end of the ledge, which at that hour of the day could not have been the best, for the reason that the morning sun, and the flashing of the river, would both interfere with the sight". Where was the sun at this hour? The parties arrived just before 7 A.M. on a date that was only 20 days after summer solstice. During the duel, therefore, the sun was coming very much from the northeast, not the east. Since the Hudson River runs northeast to southwest here (NOT due north-south), the Duel Ground would seem to have been aligned more or less parallel to the river. However other statements in Parton suggest that Burr faced in the direction of "the heights" while Hamilton faced the city, suggesting a somewhat different alignment. We may therefore assume that the orientation was somewhere in between these two extremes, making both descriptions sufficiently true. In any case, the ledge was relatively small, at 6' wide by 11 paces long. A "pace" could range up to as long as the yard covered by an energetic stride, though one suspects that the pace of a gentlemanly second might have been somewhat less. Even at 33 ft. in length, there would have been plenty of room for such a ledge beneath these cliffs, in whatever orientation it lay. Anyone who has hiked the foot of the Palisades in the still-wild areas can confirm that the orientation of the cliff walls in detail is variable along its length, within the general northeast-southwest orientation. A ledge of the Duel Ground size could easily be fitted within such variability, whatever its orientation. As can be seen from Parton's description and from maps showing the site, the southern end of Kings Bluff is an important landmark. At this point the Palisades formation appears to end its long cruise alongside the Hudson River, though in reality it only steps back from the Hudson River a long distance, with the ravine (cut by Weehawken Creek) intervening. The Bluff is such a prominent landmark that some writers have proposed that the name "Weehawken" itself comes from an Indian word "Awiehaken" meaning "at the end" [of the Palisades] (Becker, 1964, p. 86), and it is true that south of here the Palisades no longer rise almost right up from the river. The south face of Kings Bluff still stands out clearly today. It appears unmistakably in 19th century engravings, and in most maps that make an effort to show the topography (the "Eddy Map" is an exception). It has not been cut away significantly in the intervening years, so that it can be taken as a reasonably fixed reference point through time.

A 1924 history of the county, Van Winkle's *History of the Municipalities of Hudson County* (Vol. I, p. 501), also discusses the dueling ground. Much of his discussion is clearly based on Winfield's history, but in addition the book states that "its exact location may be found by extending the lines of Fortieth and Forty-Second streets, New York City, westerly across the river to the New Jersey side, which boundaries will enclose the famous spot." No source is given for this information, and the writer was writing too recently to have himself seen the site before its destruction, so the placement may not be exactly accurate, but it is in general harmony with other statements and with early maps, so it may contribute something to the evidence, and is certainly not in major conflict with the location given by Parton and Winfield.

Concerning maps, if a surveyor was producing a map at a time when the Duel Ground was still intact and in service (i.e. pre-1845), and went to the effort of showing the location on his map, and if other aspects of the map are shown well (we can judge that from things such as Kings Bluff that are still present), then such a map should clearly be taken as evidence for the location. I have provided below a list of maps that show the site, with some comments on some of them. On the attached pages I reproduce the relevant sections of two maps that are prior to 1845 and which seem to show the topography in this area quite accurately.

We know from maps and other sources that a road was built through the site after the time of the duels, i.e. after 1845, but before the railroad was built. How then do we reconcile the information given us by Winfield that the site was completely destroyed only in 1870, when the railroad was constructed, rather than in the 1850s, when the road was built? A crucial piece of information is this: the engineering of roads is quite different from railroads! The road did not have to have a level grade, and therefore followed the topography to save construction expense. This road could well have been built right through the duel site without disturbing it a great deal. In fact, there is a view of the road right where it goes through the site in Lossing's book *The Hudson From the Wilderness to the Sea* (pub. 1866, but whose drawings were done about 1860), which according to analysts of 19th century prints of the Hudson River is generally quite accurate in its depictions. In this view, the road is clearly elevated above the river level here, and is quite narrow, and leaves the Duel Site and most of the landscape around it (including the famous "cedar tree") relatively undisturbed.

A railroad on the other hand, for technical reasons, must have a much more nearly level grade. The line in question was built a few feet above the highest level reached by the Hudson River, to avoid damage during the highest tides, but not too much higher, to avoid excessive filling in areas where its route was through the low meadows. The present grade of this railroad route (now the Hudson-Bergen Light Rail) is very likely at or a little above the level used by the New York and Fort Lee RR (the original 1870 line). Thus if the railroad chose to locate its line on or near the duel site, it would have had to cut down the site several feet.

You may ask, why did the builders not simply go around this higher site and place fill along the shore of the river, instead of cutting away the obstructions? The answer in part is foundations: cutting into the existing shelf would provide a good track foundation much more easily than trying to place a stable fill into the river where the land shelves steeply down into the water. Also the material excavated here would be useful in filling further on, something always considered by railway locating engineers: construction is much less expensive if it balances the cuts and fills rather than requiring only filling everywhere. In addition, a railroad line needs to be somewhat straighter than a 19th century road, and cannot simply follow an undulating shoreline, even if it must cut away some hills to develop this relatively straight line.

All the old descriptions of the duel ground mention that it was reached by boat. What kind of shoreline conditions would have been necessary for a boat landing nearby? One must not confuse present day requirements for a ferry landing with the needs of a small 19th century rowboat. In 1804, boats of the kind used to ferry Hamilton and Burr to the site did not require a manmade pier; they could land anywhere there was a natural landing such as a broad rock next to the water, with a path leading up to the duel site, as clearly described in the old accounts of this site, and the men of the time were quite accustomed to carrying burdens to boats at places like this.

In summary, several important historians have described the duel ground as a major item of historical interest, and its geographic location has always been referred to. One reason is that the location was intrinsically a dramatic one: not in an open field or marshy area, in sight of and accessible from the surrounding locale, but rather (according to all the contemporary sources) it consisted of a small ledge hemmed in with rocks and trees, and with the dramatic backdrop of tall cliffs rising directly behind it. There was no access to it from land, only from water. These writers state that this was the whole reason for the choice of this place for duels. This dramatic surround certainly contributes to the romance of the location of the Duel Ground, perhaps even to the point of contributing to the longevity of the tradition of dueling here. The potential duellers may have been influenced by the availability of a very special, ritualistic place, in which the constraints of conventional society could be set aside in favor of a more ancient, romantic tradition: the Duel. A less secretive, more everyday location would not have had such power, nor would it have captivated so many historians and their readers down through the centuries since July 11, 1804.

References

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Van Winkle, Daniel: *History of the Municipalities of Hudson County, New Jersey, 1630-1923*, 3 vols. (NY: Lewis Historical Publishing Co., 1924) (author was pres. of Hudson County Hist. Society) Weehawken is described in Vol. I.

Winfield, Charles H.: *History of Hudson County, New Jersey, from its Earliest Settlement to the Present Time* (NY: Kennard & Hay Stationers, 1874; reprinted by Bergen Historic Books 1995, Englewood, NJ) Pp. 200-231 cover the "Duels at Weehawken".

Map References

1812 (and later revisions), the "Eddy" Map: titled "Map of the Country Thirty Miles Around the City of New York", pub. 1812 by Prior & Dunning; engraved on copper by P. Maverick. In NY Public Library, as are later revisions of the map; reproduced at reduced size in Stokes *Iconography*, vol. 3, Pl. 82. This map has major metric and topographic errors, as can easily be seen for example by looking at the width of Manhattan: it is only slightly wider than the Hudson River on this map! The topography is also clearly wrong, by comparison with US Geological Survey topographic maps. The map is mentioned here only to confirm that it has been checked. [Ed. Note - Ed. note - the relevant portion of the 1842 edition of this map is available on the Weehawken Time Machine web site – search using the keyword “goodrich” to retrieve it.]

1821: John Randel, Jr.: "The City of New York, as Laid Out by the Commissioners, with the Surrounding Country", prepared under contract to the City of New York by a surveyor. In NY Public Library; reproduced in Cohen and Augustyn, 1995, *Manhattan in Maps*, 106. Appears to show the duel site to be about 1200-1500 ft. north of the Weehawken Creek indentation.

1841, Douglass "Topographical Map of Jersey City, Hoboken and the Adjacent Country Describing Minutely the Courses of Rivers, Brooks, the Township and Original Patent Lines; Railways, Turnpike Carriage & Bridle x; the present farm boundaries with the names of their Proprietors, A correct plant of Public Grounds and Gentlemen's Country Seats, the position of Farm Houses, Forests, Swamps and Marshes, showing a complete view of the Face of the Country, from an actual survey by L.F. Douglass, Engineer, Jersey City, 1841, published by the author" (available in Jersey City Public Library). (appears accurate topographically) - the spot labeled where "Gen. Hamilton fell" measures a little over 1000 ft. north of the south end of Kings Bluff, and about 2100 ft. north of the indentation of Weehawken Creek. [Ed. note - the relevant portion of this map is available on the Weehawken Time Machine web site – search using the keyword “douglass” to retrieve it.]

1842: Morse & Breese: "New York and Vicinity", Entered according to Act of Congress in the year 1842 by Sidney E. Morse and Samuel Breese in the Clerks Office of the Southern District of New York (also appears accurate topographically). On this map, the Hamilton monument scales out to be 1300' north of Kings Bluff end, and about 2000 ft. north of the Weehawken Creek indentation (and most directly opposite 39th St. in Manhattan). [Ed. note - the relevant portion of this map is available on the Weehawken Time Machine web site – search using the keyword “morse” to retrieve it.]

1857: Colton (publisher) "Topographical Map of the City and County of New-York and the Adjacent Country" (available in NY Public Library). This depiction of Weehawken appears somewhat crude, but it does locate the Duel Ground between the south end of Kings Bluff and the bluff at "Days Point" (later site of West Shore Ferry Terminal). The location measures somewhat over 2000 ft. north of the indentation for Weehawken Creek, in agreement with the 1840s maps.

1881: "Map of Hudson County, N.J." by Spielmann and Brush, Civil Engineers, 13 Newark St., Hoboken, N.J. (they were official surveyors for Hudson County and for Hoboken Land & Improvement Co. (available at Jersey City Public Library). Also shows the Duel Ground between Kings Bluff and Day's Point. While this map is dated much later, it was produced by respected surveyors who had been mapping Hudson County for many years.

USGS Topographic map (1967): this does not show the location of the site of course; its usefulness lies in its correct depiction of contours and geographic relations, which can be correlated with those on the more accurate early maps. It shows that a spot about 1200 ft. north of the south foot of Kings Bluff would be located over the middle tube of the Lincoln Tunnel. If this were the duel site, it would be located about where the tunnel crosses under the railroad; for reference, this is opposite 39th St. on Manhattan.
