

## Before Buono Bridge Construction, Vehicles Only Ever Accessed Rikers by Boat: True or False?



Here's a hint on the trivia-like question asked above: The answer relates to Rikers Island's leading role in the 1939 birth of LaGuardia Airport.

More precisely, it was a rebirth – that of a small North Beach, Queens, airfield, transformed into the country's then largest municipal airport. Some said it was the world's largest. What made the change-over possible was a half-mile steel span stretched across Rikers Island Channel.

### **Trucks Traveled Trestle to Feed Rikers Landfill to Airport Site**

That massive trestle served as a kind of metal feeding tube, enabling an estimated 17 million tons of Rikers Island landfill to be funneled into the future mammoth airport's vast Bowery Bay-Flushing Bay construction site: 357 acres of marshland and underwater grid work.

Tens of thousands of truck trips delivered the materials. Operations went on around the clock six days a week for two years. The span had a movable section which, in the open position, allowed passage of water craft through the Rikers Island Channel. Planners had chosen that arrangement rather than clog the channel with barges going back and forth. The crossing structure facilitated turning the 105-acre North Beach Airport, formerly the Glen H. Curtis Airport, into 557-acre New York Municipal Airport-LaGuardia Field.

About three and a half decades later, a somewhat similar temporary crossing structure spanned Bowery Bay, linking the island and Queens to facilitate construction of the permanent bridge opened in 1966 and named for Rikers' Supervising Warden Francis R. Buono in 1978.



In recognition of the essential role that Rikers would play in the creation of New York City's planned commercial airport, the Sept. 10<sup>th</sup>, 1937, groundbreaking program provided for the first steam shovel load of fill to be dug on the island by the mayor himself seated at the controls, with a similar ritual to follow at the Queens site, a NYPD launch transporting him between the ceremonial scenes.

One might imagine, given all those inmates housed at the then still "new" Rikers Island Penitentiary (it had opened only a couple of years earlier), that NYC would avail itself of the available

The above Federal Aviation Administration 1937 aerial photo shows the North Beach, Queens, airport construction site and the Rikers Island, Bronx, with the penitentiary complex positioned on the north-westerly portion (left) and the trash dump region more easterly (right). The steel trestle connecting the island to the airport expansion site can be seen with its movable section in the open position to permit water craft passage in Rikers Island Channel.

The curved roadway of Grand Central Parkway can be seen in the foreground. If you look closely in upper left sector of the image, you can spot in the East River west of Rikers Island the two Brother Islands, the larger and more northerly one being home to Mary Mallon aka Typhoid Mary at that time. Confined two decades at Riverside Hospital there, she died in 1938.

"free" convict labor for the landfill transfer and that City Hall would happily let the taxpayers know about how it "saved" them a lot of money. Not so.

#### **No Report Found of 'Free Convict Labor' Used**

The airport's construction was a federal Works Progress Administration endeavor undertaken in keeping with WPA's mandate to help reduce the Great Depression's high unemployment by hiring workers on public infrastructure projects.

As the agency's biggest urban undertaking up to that point, the \$45 million project was a showcase for FDR's New Deal "putting people back to work."

At its height, the payroll workforce numbered approximately 23,000 and the WPA proudly proclaimed it.



So, if any “free labor” by inmates was done, publicity wasn’t sought.

That may

account for why research so far has failed to find any published reference to inmate input.

Additionally, since the landfill transfer involved such a large number of hired laborers, placing prisoners in their proximity would have presented potential security concerns.

Those considerations likely reinforced what would have been DOC’s own standard inclination to maintain strict demarcation between

The above image showing the steel trestle spanning Rikers Island Channel and connecting the island to the LaGuardia Airport construction site is detail section from an aerial photo in a 1941 DOC report. It and other detail sections from that aerial photo appear on Page 3 of the CorrectionHistory.Org website’s four-page presentation “Rikers Island Had a Farm: E - I - E - I - O . . . and Still Does.”

The focus of the Page 3 text, like the focus of the entire presentation itself, was on the agricultural history of the island. The attention of those reading Page 3 was directed to the “barn and coops near the lower right corner of the image . . . [They] are the same ones seen, albeit from a different perspective and closer range, in the top-of-the-page image of Page 2 of [the] presentation.”

The trestle (center near the top of the image) was not addressed. Note the movable section of the span is in the open position to allow water craft passage through Rikers Island Channel.

Note also the structures visible in the lower left section of the image are part of Rikers Island Penitentiary which had opened only four years before LaGuardia Field’s 1939 opening.

The “Rikers Island Had a Farm” presentation, with the above image as part of it, has been on the CorrectionHistory.Org website for about a decade.

airport construction activities and prison operations on the island.

Nevertheless, at some levels and on some matters, communication and cooperation between airport construction authorities and Correction authorities must have taken place sometimes, if only from sheer necessity, theirs being the major presences sharing the same island.

The island’s contribution to the small Queens airfield’s emergence as the region’s major airport was significant, essential and continued long after its opening. Rikers not only provided the earthy underpinnings for the runways from which the airplanes took off and on which they landed; it also hosted radio communication equipment that guided their flights.

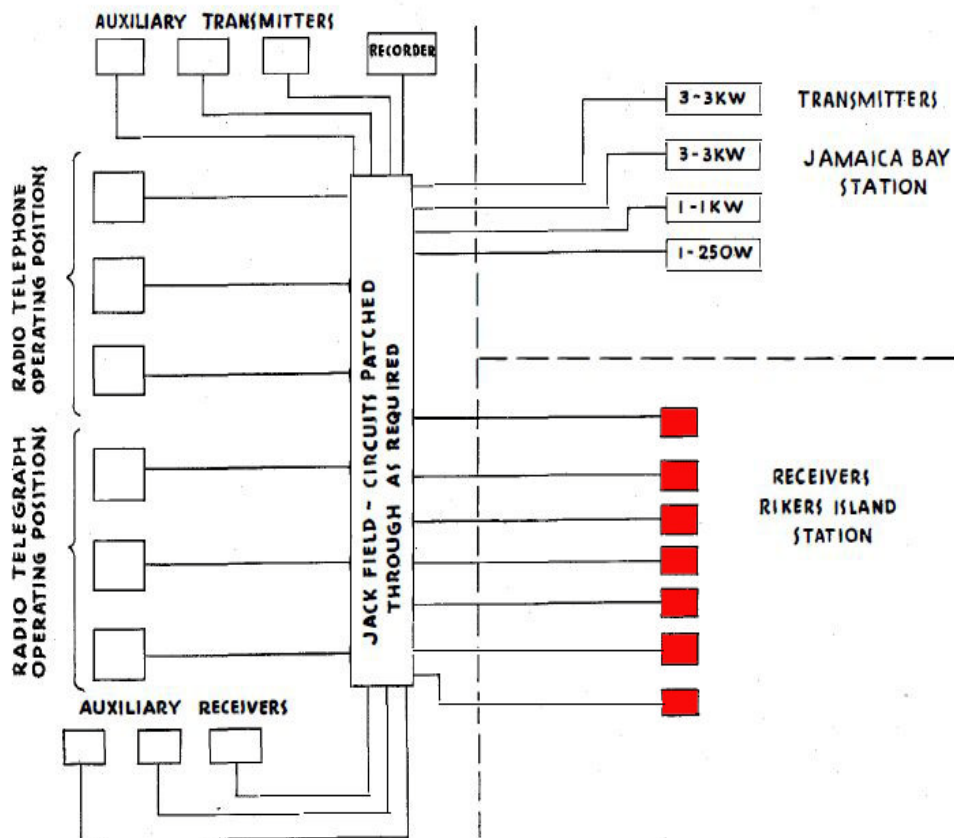


Fig. 5—Schematic of Radio Transmitting and Receiving Facilities, American Airlines, La Guardia Field, New York.

As *Aviation Week* noted in 1939, “The [radio signal] receiver installation for the control tower, for example, has no less than 21 units, 15 remotely operated on Riker’s Island, and six in the tower itself.” Also in 1939, *Aero Digest* commented, “The remotely controlled receivers, supplied by Western Electric Co. and installed by Radio Receptor Co., are housed in a brick building at Rikers Island.”

Details of Rikers’ part in LaGuardia Airport early radio operations appeared in an article titled *Airport Communications*. The 18-page report was printed in the 1941, Volume XX, No. 1 issue of *Electrical Communication*, a trade quarterly published by the International Standard Electric Corporation

The above schematic, depicting American Airlines’ Radio Transmitting and Receiving Facilities that were part of its early flight operations at the then new LaGuardia Airport, includes those which were situated on Rikers Island (here highlighted in red for emphasis by the Correction History webmaster). The schematic appeared in an 18-page article about “*Airport Communications*” published in a 1941 issue of the International Standard Electric Corporation’s *Electrical Communications* quarterly.

The Rikers Island-based Radio Receiving Facilities depicted in the original schematic, without the added red, were those of American Airlines. In his article, R. H. Riddle detailed its use of Rikers-situated radio receivers as well as those based there used by Transcontinental and Western Air, United Air Lines, Eastern Airlines, Pan American, and the Army. (See relevant Riddle article quotes, cited to the right and beginning below.

(ISEC) for telephone, telegraph and radio professionals. R.H. Riddle of ISEC wrote:

“A group of 15 23-A Western Electric receivers are installed at the remote[ly operated] station on nearby Riker’s Island. American Airlines employs two on night frequencies, four on day frequencies; Transcontinental and Western Air, two at night and one on day frequencies; United Air Lines, one day and one night frequency; Eastern Airlines, one frequency; and Pan American, one frequency.



The images above and to the left are overlapping sections from an aerial photo showing the NYC Parks Department's Rikers Island tree nursery "behind" new ARDC circa 1972.

Looking like a white sombrero surrounded by that arboreal nursery is what has been identified by retired veteran DOCers as LaGuardia Airport's radio beacon aiding air traffic.

From the trees and radio beacon was derived the original name of the facility later dedicated in honor of former Chief of Dept. and Acting Commissioner George R. Vierno: "Nursery Beacon."

Eventually, the tree nursery program ended but the airport radio installation remained long afterward; thus shortened, "the Beacon" continued as GRVC's nickname.

"One receiver is kept on the Army frequency . . . and one on the itinerant frequency of 3,105 kc.

"The receivers are single frequency crystal control units , [each] with a highly effective CORDAN circuit (Carrier Operated Devise Anti-Noise) which blocks the audio output of the receiver except in the presence of a carrier.

"A submarine cable connects the equipment on Rikers Island with that at the

control tower proper." Riddle's article went on to explain how the units on Rikers (and their day and night frequencies) enabled planes to use the same frequencies for LaGuardia control tower communications as they had been using for flight guidance from their respective airlines:

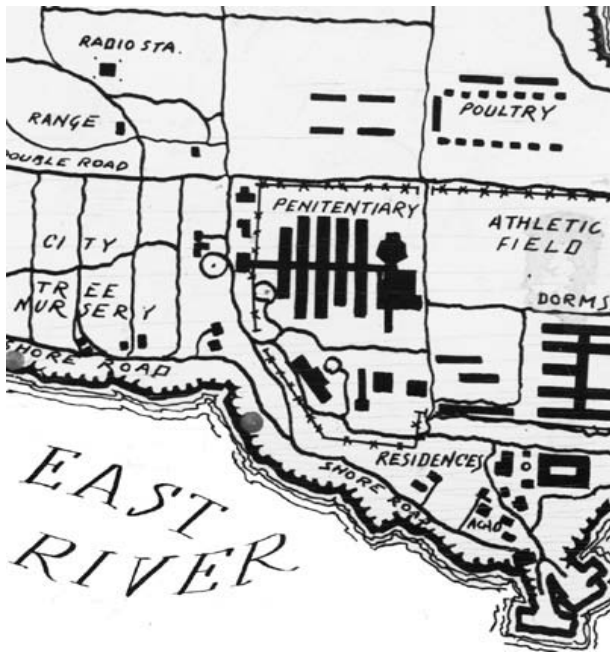
"As planes approach within 10 minutes flying distance or approximately twenty-five to thirty miles of the airport, control of their flight is shifted from the airline or Airways Traffic Control, as the case may be, to the airport control tower.

"The control tower receives from commercial planes on the frequencies used for contacts with their respective communications centers.

#### **Night Use of 'Day Frequencies,' Day Use of 'Night Frequencies'**

"Commercial planes, however, call the tower on their night frequency during the day, and on their day frequency at night, in order to avoid interference with other planes of the line talking to their own communication centers.

"Since military, police and itinerant planes also must receive their landing instructions from the tower, the transmitting frequencies of such planes must be available to the control tower."



Eventually the trestle which had fed fill to the airport site was removed from Rikers Island Channel. A NYC Parks Department tree nursery was planted on the remains of the island’s landfill hill from which had been extracted the fill transported on the span.

**GRVC’s 1<sup>st</sup> Name: ‘Nursery-Beacon’**

The replacement of LaGuardia Airport’s older directional range transmitters (beacons) by installation of more advanced Doppler VOR on Rikers Island was widely reported in aviation publications in 1959-1961.

As 1972 aerial photos on the preceding page show, the Rikers radio “beacon” had a small forest of Parks Department trees as its setting.

The above detail from an illustration roughly depicts the relative locations of various Rikers features during the mid-20<sup>th</sup> Century era when a section of the “City Tree Nursery” covering much of the East side of the island was situated directly across from the front entrance of the Penitentiary and its flag pole circular drive.

That trees section was later displaced by the jail which eventually became the George Motchan Detention Center. In the sketch’s upper left area a dark rectangle with a tiny dot at each of its corners, labeled “radio sta.,” evidentially represents the airport’s radio station.

The official name for the jail, eventually dedicated in retired Chief of Dept. George R. Vierno’s honor, had been “Nursery-Beacon” because its site’s proximity to those features of the island then.

When in the 1980s DOC began planning to build on the island a male-inmates jail in the vicinity of the Beacon and the tree nursery, it was dubbed not surprisingly “Nursery-Beacon.”

That was the official designation as reflected in DOC’s reports to the Board of Correction. For example, Deputy Commissioner Sharon Keilin at the monitoring board’s March 4<sup>th</sup>, 1986, meeting, informed its members about two new jails planned for the island’s eastern region:

“The East Facility will be ready for occupancy in 1988, and will house women. It will have a thirty-bed nursery, and will meet Mental Health Minimum Standards for new facilities . . . .

“The Rikers Island Development Plan calls for a new facility on the East end of the Island, to be called Nursery-Beacon I, which would be an 850-bed male detention facility, built on the same plans as the East Facility , without the nursery and with the East Facility ’ s one minimum security wing built as a maximum security area.”

Use of the “Nursery-Beacon” appellation whenever the facility came up for board discussion is reflected throughout the recorded minutes until the January 1991 meeting when its naming in honor retired Chief of Dept. and Acting Commissioner George R. Vierno was announced. He had died the previous month.



Often in historical research, following up on one “loose” or not previously pursued thread of inquiry may lead to discoveries clarifying certain particulars of the past, only to open up still more loose “threads” to pursue.

Such is the case at hand.

While researching an airplane crash that happened in Bowery and Flushing Bay waters during WWII (subject of the next presentation), the

In the above 1948 Rikers aerial photo section, draw an imaginary vertical line through the center of the image. The church-like structure you see to the right of your imaginary line was the former Catholic Rectory and Chapel of the Sacred Heart. The building these days serves department purposes. To the left of your imaginary line see the Protestant Mission House and Chapel which no longer exists. Behind it see part of the former “City Tree Nursery” depicted in the illustration on the preceding page. That joint Parks and Correction Departments’ program had been in place when this photo was taken. Note the former traffic circle that was depicted in the sketch is also seen at the Penitentiary entrance in this 1948 photo.

Correction History webmaster came across references to Rikers Island Channel, a designation he had not previously studied. Following up on that led to details about the trestle which spanned the channel decades before the Francis R. Buono Memorial Bridge.

The trestle facts link to construction of the airport with landfill from Rikers which, in turn, links to the tree nursery and the airport radio beacon from which was derived the original name “Nursery-Beacon” for GRVC.

#### **Readers’ Help Invited on 2 ‘Loose Threads’**

But in pursuing those lines of research, at least two other loose threads of inquiry emerged on which the readers’ help would be most welcomed:

- Research establishes that more than a dozen radio communication receivers were installed on the island circa 1939 as part of the massively expanded NY Municipal Airport - LaGuardia Field early operations and that a Doppler VOR directional range transmitter (beacon) was installed beginning in the very early 1960s. But so far, on-line research has failed to find a *close-up photo* of the airport radio receiver or transmitter installations on Rikers Island. If anyone has or knows someone or some place that has such a photo or digital image, please let the webmaster know via CorrectionHistory at gmail.
- The illustration detail on the preceding page depicts a structure labeled “Range” below another structure labeled “Radio Sta.” which is interpreted as “Radio Station.” Does any reader know or has an acquaintance who might know if Rikers Island ever had a *firearms*

*practice range* in the “radio station” vicinity or whether that building labeled “range” represents a radio range directional transmitter facility? If someone does, please let the webmaster know via CorrectionHistory at gmail.

### **Notes, Acknowledgments and Links**

-- The Page 1 Rikers bridge photo upon which the trivia-like bridge question was layered digitally is from a selection of images generously made available for presentation on the Correction History website by retired Assistant Chief **Richard Pagan** from his personal photo collection. The website's 5-page display of his selection of images can be accessed at [Chief Pagan's NYC Correction Photos Collection Page 1](#)

-- Thanks go to retired Chief of Department **Martin Murphy**'s quietly calling the attention of the webmaster to an overlooked point during the New York Correction History Facebook group's advance look at a working draft of this presentation. As a result, the trivia-like question was made more precise and historically inclusive by the addition of the word “Construction” to the phrase “Before Buono Bridge.” Also as a result, a paragraph about the temporary span used during Rikers Island Bridge construction was added to Page 1 of this presentation's main text.

-- Thanks to the commentary by a half-dozen members of the New York Correction History Facebook group responding to the same images shown on Pages 5 and 6 of this presentation, the webmaster was able to confirm his conclusion that the Sombrero shape structure in the aerial photo section featuring the tree nursery was the airport-related installation commonly called "the Beacon" by Rikers Islanders. Here is a transcription of their commentary.

**Ira Finkelstein** recalled that, while he was assigned at RI Hq/security 1973 through the late 80s, he was aware that LaGuardia Airport personnel visited the Beacon tower-like installation "once and a while." He was told, "It was a control tower monitoring system. It was a white building by the tree nursery. There was a road up to it surrounded by a fence."

**Bob Leibrock**, a moderator of the NY Correction History FB group, concurred with Ira's recollection, adding "Yes, I use to drive up there whenever I did outside patrol on OT."

**Fred Bacchi** recalled, "It wasn't where GRVC is today. On the hill between GRVC and the Airport, it was a round building with an upsidedown cone in the center. [Then] they built that tall tower on Mandinici Road and that was supposed to take its place."

**Michael Maurizi** asked, "Didn't it have a ring of orange globes around it too?"

The webmaster/FB group admin queried: "Are we all talking about what looks like a white sombrero in the detail section from the aerial photo as the beacon?"

**Ira Finkelstein** answered: "Yes."

**Aloysius Van Goli** added: "The RADAR beacon for LGA, it was called the Sombrero and has been moved off [the island] to the side of the runway. You can see it from the GRVC annex roof."

Our 1,797-member Facebook group is an important resource for those interested in, studying or researching NY Correction History. Thanks, members. Because it is what is known as an “open” or “public” FB group, any Facebooker can access and read its postings. But to post a question or make a comment, one must become a member. The URL is: <https://www.facebook.com/groups/NewYorkCorrectionHistory>

-- The Rikers Island Channel trestle aerial image at the top of Page 2 of this presentation is from a Federal Aviation Administration aerial photo appearing in Cradle of Aviation Museum curator **Joshua Stoff**'s *Images of America: LaGuardia Airport* published by Arcadia in 2008. The book's other excellent aerial view of the steel span which linked the island to the airport construction site is from the Garden City museum's vast archive of aviation history photos. Google provides the book's summary of the narrative involved in the airport's



development as well as an extensive sampling of the many historical photos in the book. The following link will take you to the book's other aerial photo of the connecting trestle:

[https://books.google.com/books?id=VwGGmz2vVDUC&pg=PA27&lpg=PA27&dq=Designed+as+the+largest,+most+beautiful+and+most+advanced&source=bl&ots=A2zVsYu8jI&sig=JQo3l0OBRdjHh-IYP8VvSSynx1w&hl=en&sa=X&ved=0ahUKEwjUy\\_X-9MPWAhVEMhoKHfBbBF8Q6AEIRDAH#v=onepage&q=Designed%20as%20the%20largest%2C%20most%20beautiful%20and%20most%20advanced&f=false](https://books.google.com/books?id=VwGGmz2vVDUC&pg=PA27&lpg=PA27&dq=Designed+as+the+largest,+most+beautiful+and+most+advanced&source=bl&ots=A2zVsYu8jI&sig=JQo3l0OBRdjHh-IYP8VvSSynx1w&hl=en&sa=X&ved=0ahUKEwjUy_X-9MPWAhVEMhoKHfBbBF8Q6AEIRDAH#v=onepage&q=Designed%20as%20the%20largest%2C%20most%20beautiful%20and%20most%20advanced&f=false)

-- Images on Pages 3, 5, 6 and 7 of this presentation came from images on Pages 3 and 4 of the Correction History website's 4-Page "Rikers Island Had a Farm: E-I-E-I-O . . . and still does!" presentation. The focus of that presentation was on the island's agricultural history, not the airport. The links to those two pages are:

<http://www.correctionhistory.org/html/chronicl/rikersfarm/rikersfarm3.html>

and

<http://www.correctionhistory.org/html/chronicl/rikersfarm/rikersfarm4.html>

-- Two Correction History website pages specifically detail the opening (1966) of the Rikers Island Bridge and its dedication (1978) as the Francis R. Buono Memorial Bridge:

<http://www.correctionhistory.org/html/chronicl/nycdoc/html/rispan2.html>

<http://www.correctionhistory.org/html/chronicl/nycdoc/html/buono.html>

Return to the New York Correction History home page:

<http://www.correctionhistory.org/>

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