

## Detroit City Airport: Site Summary

The following information was extracted from public records.

### Address

11499 Connor Street, Detroit, MI

### Site Description/History

Public records indicate the Detroit City Airport was opened in 1927, with an address of 11499 Connor Street, Detroit, MI. The original terminal building, at the southeast edge of the airport, was completed in 1930. In 1966, a new terminal was built to the northwest, and the original terminal/administration building and adjoining airplane hangars became known as the Executive Terminal (see Figure 1). A runway expansion occurred in 1988, but the runways were still too short for many commercial flights; all commercial airlines left the airport by 2000.

The Detroit City Airport was renamed the Coleman A. Young International Airport in 2003 and is currently owned by the city of Detroit. The current terminal (built in 1966) is used for private, cargo, and corporate airplanes under the Department of Transportation, Federal Aviation Administration (FAA), jurisdiction. The city of Detroit is exploring expansion and revitalization of the airport to allow commercial flights again.

The Executive Terminal (see Figures 2 and 3), which consists of 14 hangar bays and the old terminal/administration area, has a footprint of approximately 205,000 ft<sup>2</sup>. The executive terminal extends 1,014 feet in length parallel to Conner Street (Figure 3). Its width measures 250 feet wide at the southeast end, 204 feet wide for the middle 786 feet, and 127.5 feet wide for the 114 foot-long bay on the northern end. The two-story structure sits on a concrete pile foundation. The Executive Terminal has been used for many different purposes since 2000.

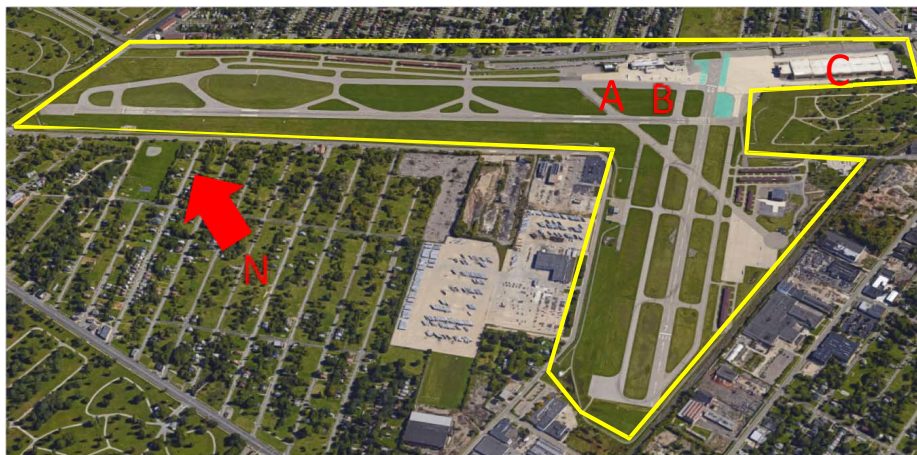


Figure 1. Coleman A. Young International Airport, formerly Detroit City Airport (Google Earth, 2017).  
A. Control Tower; B. Current Terminal (built in 1966); C. Executive Terminal (built in 1930).



Figure 2. Executive Terminal showing location of original terminal/administration area (T) and approximate location of hangars 1 thru 14 (Google Earth, 2017).



Figure 3. Executive Terminal, view from Connor Street, showing location of original terminal/administration area (T) and approximate locations of odd-numbered hangars (Google Earth, 2017).

**The amount/extent of radium contamination at these sites (including historical information and/or informed assumptions about the radium facilities' structures/areas, processes, and activities)**

Use of luminous radium materials was prevalent in manufacturing of aircraft instruments during the World War II era. Applications of luminous radium materials included aircraft instrumentation, such as faces, needles, and pointers of dials and gauges; switches; toggles; and other luminous markings. Aircraft instrument repair businesses were common during the war and in the post-war era and included the repair/refurbishing of aircraft dials and gauges containing luminous radium materials. Post-war aircraft instrument repair companies located at the Detroit City Airport included Beacon Instrument Service, Michigan Aviation Company, and Detroit Pilot Center.

It is known that these three companies repaired aircraft instruments containing luminous radium materials in hangars of the Executive Terminal at the Detroit City Airport. Correspondence from the FAA, and the Michigan (MI) Department of Environmental Quality (DEQ) to these companies that verifies historical radium contamination were provided by the State of Michigan.

### **Beacon Instrument Service Inc.**

Beacon Instrument was incorporated in 1966, and records indicate it was located in hangar bays 9 and/or 13 of the Executive Terminal. Beacon Instrument repaired aircraft instruments containing luminous radium. In 2001, the MI DEQ coordinated with the U.S. Department of the Army (Army) to arrange a pickup of discrete radium-bearing instruments and parts. By 2003, these radium-bearing parts, as well as sequestered luminous radium paint sources, were removed by Duratek Inc., a disposal contractor for the Army. Records indicate Beacon Instruments had plans to close and that some contaminated equipment was sold to an outside party. It is unknown when this company closed.

### **Michigan Aviation Company**

Michigan Aviation Company was located in hangar bays 9 and/or 10 of the Executive Terminal. In 2001, the MI DEQ coordinated with the Army to arrange a pickup of discrete radium-bearing instruments and parts. By 2003, the parts were removed by Duratek Inc., a disposal contractor for the Army. It is unknown when this company was incorporated, but magazine advertisements indicate that it was a viable company in 1954. It is unknown when this company closed.

### **Detroit Pilot Center**

Detroit Pilot Center was located in an unknown location at the Detroit City Airport. An address of 12401 Conner St., Detroit, MI was identified for this company. In 2000, hangar bay 10 at Detroit City Airport contained aircraft instruments belonging to Detroit Pilot Center. In 2001, the MI DEQ coordinated with the Army to arrange a pickup of discrete radium-bearing instruments and parts. By 2003, the parts were removed by Duratek Inc., a disposal contractor for the Army. It is unknown when this company was incorporated or closed.

### Historical Radiological Survey Information

Records indicate that in 1992, the FAA, and the MI DEQ provided notifications to aircraft instrument repair stations in Michigan regarding health hazards from exposure to luminous radium materials in historic aircraft instruments (letter provided by the state of Michigan). Aircraft instrument repair stations located at Detroit City Airport were included in these notifications. Records from 1992 indicate Beacon Instruments had aircraft instruments that contained luminous radium materials at the Detroit City Airport. In 1997, MI DEQ conducted radiological surveys in some areas of hangar bay 9, and contamination was detected in excess of MI DEQ surface contamination limits. Over a period of several years (2000-2003), MI DEQ conducted radiological surveys in several of the hangar bays (9, 10, and 13) to address contamination.

These radiological surveys focused on work rooms/storage rooms inside the hangar bays.

Recommendations from MI DEQ included: secure storage of aircraft instruments and related parts containing luminous radium; reduce worker exposure; decontaminate radiologically contaminated floors, countertops, and other surfaces; and seal radiologically contaminated surfaces that could not be decontaminated.

During the same time, MI DEQ required registration of gauges and switches containing Ra-226, following MI DEQ Ionizing Radiation Rules. Records indicate an outcome of the above mentioned radiological surveys, along with registration of Ra-226 containing instruments, was to have the “sources” of radium (gauges, dials, pointers, toggles, etc.) segregated and properly disposed. In 2001, MI DEQ catalogued radium containing gauges, dials, toggles, and switches belonging to Beacon Instruments, Michigan Aviation, and Detroit Pilot Center located at the Detroit City Airport. The detailed inventory was sent to the Army to determine which of these were of military origin. Subsequently, the MI DEQ coordinated with the Army to have an Army subcontractor (Duratek Inc.) package and dispose of radium containing aircraft instruments at a permitted offsite disposal facility. This was completed by 2003. After removal of the identified radium containing aircraft instruments, it is unknown if repairs of aircraft instruments containing luminous radium materials continued at Detroit City Airport.

#### Summary of Current Radium Levels:

As of January 2018, current levels of radium are unknown based on information reviewed for this report. However, it is assumed that radium contamination exists on site because contamination was previously identified and cleanup records could not be located.

#### **Location and population near the sites**

The Detroit City Airport is located on an airport; however, there are nearby residences, as seen in Figure 4.

Detroit is a city in Wayne County. The 2015 population estimate for the city was 677,116.

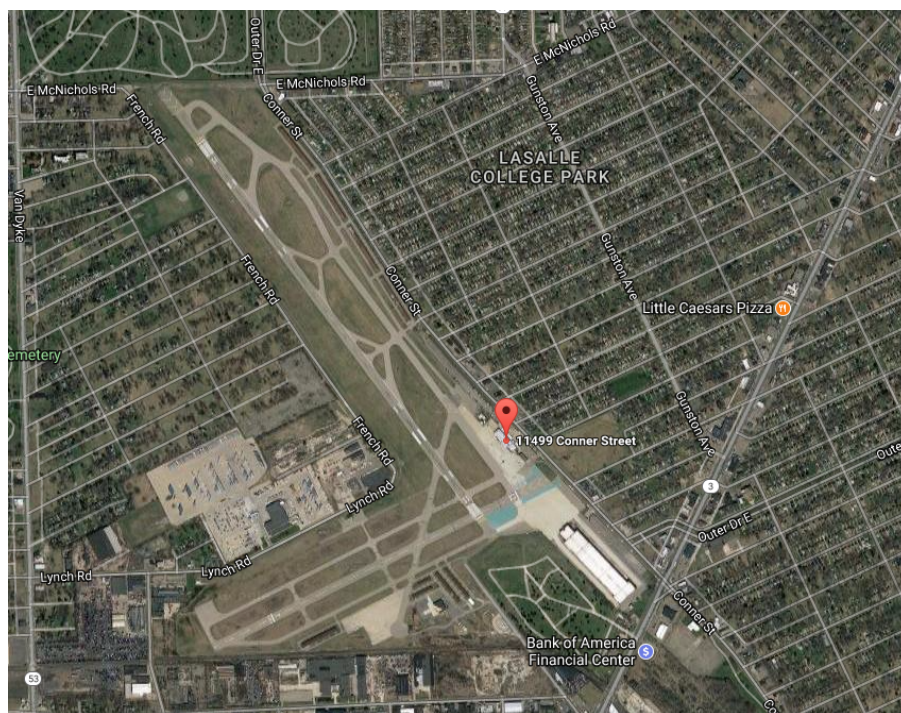


Figure 4. Detroit City Airport site (11499 Connor Street, Detroit, MI) (Google, Earth 2017)

### **Current State/other Federal involvement**

Information provided by the State of Michigan states that previous removal activities were performed by the Army. These activities included removal of contaminated gauges and dials from the property. There is currently no State/other Federal involvement at the site.

### **Current access, activities, and uses at the site**

Today, the city of Detroit leases space in some of the hangars for storage of private and corporate airplanes. Other hangars are used for storage and display of airplanes that are part of the World Heritage Air Museum; these are stored in hangar 9 (and possibly 7). Still other areas of hangars are used by the Aero Mechanics High School in Detroit. On the second floor above the old terminal/ administration area, the Detroit Aircraft Corporation is building drones. Hangar bays 1 and 2 are currently rented out for events by the city of Detroit. There are future plans to renovate two hangar bays for a high-tech learning lab.

Figure 5 shows an image inside one of the hangars; a concrete block structure with two floors of rooms is visible in the background. Other information indicates one and two level structures in some of the hangars were wooden or sheet metal, and it is suspected these rooms were for storage and/or aircraft maintenance activities.



Figure 5. Example of “rooms” inside hangars of the Executive Terminal at Detroit City Airport. Note the blue and white two-story block structure in the hangar bay.

## Existing Engineering Controls

According to Figure 2, no engineering controls exist at the site.

## Prioritization Ranking

It is suspected that radium is present at the site because radium contamination was previously identified at the site and cleanup could not be verified. The companies listed above repaired aircraft gauges and flight instruments, which included vintage instruments that contained luminous radium. This is based on records obtained from the State of Michigan. Therefore, the site is classified as Tier 1.<sup>1</sup>

## References

Current News about Detroit City Airport <http://www.detroitnews.com/story/news/local/detroit-city/2015/03/26/city-airport-plan-may-finally-lift/70523064/>

<http://archives.californiaaviation.org/airport/msg20510.html>

<http://detroithistorical.org/learn/encyclopedia-of-detroit/detroit-city-airport>

Other Recent Uses of the Detroit City Airport

<http://archives.californiaaviation.org/ganews/msg11143.html>

Hangar 13 Location [http://hwcdn.libsyn.com/p/5/c/d/5cdf4af1898ce84e/TANHM\\_River\\_Days\\_-\\_FAA\\_Form\\_7711-2\\_2015-04-08.pdf?c\\_id=8756637&expiration=1485981207&hwt=9c58ac8872e8326fd578247d3e6af4a8](http://hwcdn.libsyn.com/p/5/c/d/5cdf4af1898ce84e/TANHM_River_Days_-_FAA_Form_7711-2_2015-04-08.pdf?c_id=8756637&expiration=1485981207&hwt=9c58ac8872e8326fd578247d3e6af4a8)

Records provided to the U.S. Nuclear Regulatory Commission (NRC) by the State of Michigan are available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. The letters are available at ADAMS Accession No. ML18019A179.

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<sup>1</sup> The site prioritization, or "Tiers," is based on the criteria provided in Enclosure 1 to NRC Commission Paper SECY-16-0020 (ADAMS Accession No. ML16291A485).