Technical Tour Summary – Tuesday, September 10th

Tour 1
Flight 93 National Memorial Tour

Tour 2
Fallingwater and Ohiopyle State Park Tour
(This tour is filled.)

Tour 3
Underground Mine & Museum and Steel Facilities Tour
(Maximum tour capacity: 54)

Tour 4
Pittsburgh Botanic Garden and Pittsburgh International Airport AML Pilot Site Tour
(Maximum tour capacity: 54)
Flight 93 National Memorial Tour

Flight 93 National Memorial

Once a former coal mine site, now the National Memorial for the passengers and crew of United Flight 93 that prevented terrorists from attacking the U.S. Capitol on September 11, 2001. The Visitor Center Complex includes the Visitor Center with exhibit area, Learning center, Allée and Western Overlook trailheads, and the Flight 93 Path Walkway and Overlook. The Memorial Plaza marks the edge of the crash site, which is the final resting place of the passengers and crew. There are 40 Memorial Groves, one for each of the passengers and crew, radiate along the Ring Road and Allée from the Visitor Center Complex to the Wetlands Bridge. The Allée, a formal walking path, follows the edge of the grove and connects the Visitor Center Complex and the Memorial Plaza, crossing the wetlands via the Wetlands Bridge. A grant from OSMRE has reclaimed the former coal mine site by installing acid mine drainage treatment facilities, which will be visited on the tour. Considerable efforts to reforest the reclaimed site have been conducted and are ongoing.

Constructed in 2018, the Tower of Voices (TOV) serves as both a visual and audible reminder of the heroism of the forty passengers and crew of United Flight 93. It is conceived as a monumental, 93 feet tall musical instrument holding forty wind chimes. There are no other chime structures like this in the world. The shape and orientation of the Tower are designed to optimize air flow through the TOV walls to reach the interior chime chamber. The chime system is designed using music theory to identify a mathematically developed range of frequencies needed to produce a distinct musical note associated with each chime. The applied music theory allows the sound produced by individual chimes to be musically compatible with the sound produced by the other chimes in the Tower. The intent is to create a set of forty tones (voices) that can connote through consonance the serenity and nobility of the site while also through dissonance recalling the event that consecrated the site.

https://www.nps.gov/flni/index.htm

There will be additional AML and/or AMD sites in this tour.
Fallingwater and Ohiopyle State Park Tour

(This tour is filled.)

Boots or solid shoes, with no open toes, should be worn on this tour. This tour is partially outdoors, rain or shine, and weather appropriate clothing should be worn.

Fallingwater

Fallingwater is a world-renowned house designed by architect, Frank Lloyd Wright in 1935 for his Pittsburgh clients, the Kaufmann family. Fallingwater is one of Wright's most widely acclaimed works and best exemplifies his philosophy of organic architecture: the harmonious union of art and nature. It has been the focus for many famous photographs and paintings. Fallingwater was entrusted to the Western PA Conservancy in 1963 and was designated as a National Historic Landmark in 1966. It is nestled within the beautiful Laurel Highlands of the Allegheny Mountains, with walking trails surrounding the home. Today, more than 5.5 million people have visited and explored Fallingwater.

https://www.fallingwater.org/

Ohiopyle State Park

Located on the southern reaches of the Laurel Ridge, Ohiopyle State Park encompasses approximately 20,500 acres of rugged natural beauty and serves as the gateway to the Laurel Highlands. Passing through the heart of the park, the rushing waters of the Youghiogheny River Gorge are the centerpiece for Ohiopyle.

Cucumber Falls is one of at least a half-dozen great waterfalls within Ohiopyle State Park. The water cascades over a 30-foot drop and flows into the “Yough” River. The falls are very picturesque amongst the boulders and trees that dot the landscape, especially in Autumn when the leaves change colors.

There are several passive treatment plants that are a part of Ohiopyle State Park that are working to clean up the waters of the Commonwealth.

http://www.discoverohiopyle.com/

There will be additional AML and/or AMD sites in this tour.
Underground Mine & Museum and Steel Facilities Tour

This tour is not recommended for anyone unable to walk great distances, negotiate rough terrain, is claustrophobic, and/or unable to climb steel stairways and cat walks. Boots or solid shoes with no open toes should be worn on this tour. Much of the tours are outdoors, rain or shine, and weather appropriate clothing should be worn that could become dirty. Temperatures underground at Tour-Ed are between 52 to 55 degrees, so please dress appropriately.

Carrie Blast Furnace
Carrie Furnace is a former blast furnace located along the Monongahela River in the Pittsburgh area industrial town of Swissvale, PA, and it had formed a part of the Homestead Steel Works. The Carrie Furnaces were built in 1884 and they operated until 1982. All that is left of the site are furnaces #6 and #7, which operated from 1907-1978. The furnaces, designated as a National Historic Landmark in 2006, are among the only pre-World War II 20th Century blast furnaces to survive. At one time, the furnaces and the steelworkers who labored in them produced more than 1,000 tons of iron a day. Now these 92-foot-tall structures stand as sentinels to Pittsburgh’s steel heritage.


Tour-Ed Mine & Museum
Experience what it was like to be a coal miner in the 1850s and today. Your guides will treat you to an amazing, educational tour 160 feet below the Earth’s surface. All guides are experienced coal miners, educated in mine safety. The tour is in an inspected, safe mine environment modified for group tours and attraction comfort. There will be a live demonstration showcasing the authentic mining tools and methods from the 1850s through today. A light jacket is suggested with a mine temperature of 52 to 55 degrees year-round.

https://tour-edmine.com/

There will be additional AML and/or AMD sites in this tour.
Russellton Coal Refuse Site

The Russellton Coal Refuse site is located in West Deer Township, Allegheny County, about 30 miles northeast of Pittsburgh. It is a multi-million ton coal refuse valley-fill disposal site that was fed for more than six decades by the coal mines in the Upper Freeport “Thick Freeport” coal, and associated coal cleaning plant. In many places the original stream valley was buried more than 100 feet deep by the waste coal. The refuse on site is currently being recovered for electricity generation by a Fluidized Bed Combustion boiler plant, Scrubgrass Generating Station, LP located approximately 70 miles north of the site. Refuse removal and reclamation is expected to take another 10 to 15 years to complete.
Pittsburgh Botanic Garden and Pittsburgh International Airport AML Pilot Site Tour

Boots or solid shoes, with no open toes, should be worn on this tour. This tour is all outdoors, rain or shine, and weather appropriate clothing, that could become dirty, should be worn.

Pittsburgh Botanic Garden
AML Pilot Site

Since opening to the public in 2015, tens of thousands of visitors have come to Pittsburgh Botanic Garden to enjoy cultivated woodlands, gardens, wildlife, and trails. Pittsburgh Botanic Garden features thousands of native trees, shrubs, and perennials planted since 2010 in an effort to cultivate and restore a native habitat to land once damaged by decades of deep-mining, strip-mining, and clear cutting. Acid mine drainage had polluted a pond in the Woodlands: neither plants or animals could live in the pond. The pond is now the centerpiece of the Japanese Garden, a key feature of the Asian Woodlands. The Woodland’s acid mine drainage problem was awarded the 2014 Governor’s Award for Environmental Excellence and is a good example of a public-private partnership. Partners in the pond restoration project include the Office of Surface Mining and the PA DEP Growing Greener Program, the Allegheny County Conservation District, the Foundation for PA Watersheds, Trout Unlimited, Colcom Foundation, and an anonymous foundation. A 2016 AML Pilot project is underway to reclaim underground mine workings, surface mine cuts, and a dangerous highwall, stabilize 30 subsidence holes, relocate the Lotus Pond’s sludge basin, and install a passive mine drainage system for an underground mine discharge. Additional AML reclamation and garden development is continuing using funding from the 2016 AML Pilot Program. [http://pittsburghbotanicgarden.org/](http://pittsburghbotanicgarden.org/)

Pittsburgh International Airport AML Pilot Site

The 2016 AML Pilot funding is being used to facilitate the reclamation of two dangerous highwalls on an abandoned surface mine site located on Pittsburgh International Airport property. After the AML conditions are removed, the Allegheny County Airport Authority will develop the “Pittsburgh Airport Innovation Campus.” The innovation campus will include office space, research and development facilities, service center retail, mixed-use town center, and an aviation facility immediately adjacent to the Pittsburgh International Airport.
North Fork Montour Run Passive Treatment System
The North Fork Montour Run passive treatment system was installed on Pittsburgh International Airport property in 2008 to treat an abandoned underground mine discharge from the Clinton No. 1 Mine, which was mined by the Clinton Block Coal Company around 1938. The system is preventing approximately 32,300 pounds of acid and 32,000 pounds of iron compounds annually from entering the North Fork of Montour Run. The project was funded by the PA Department of Environmental Protection, the U.S. Office of Surface Mining Reclamation and Enforcement, and the PA Turnpike Commission. BioMost Inc. designed the passive treatment system that consists of a mine drainage conveyance pipe with alkaline pipe bedding, three settling ponds, two vertical flow ponds that can operate either in parallel or series, and a 1/3-acre wetland. The system also includes three TROMPES, which provide aeration for the mine drainage treatment.

Milk Run Passive Treatment System
Currently in construction, the Milk Run passive treatment system will treat an abandoned underground mine discharge at the headwaters of Milk Run. This AMD discharge, known as MKR3, is the single largest source of acidity and aluminum in the Montour Run Watershed. The design will use natural limestone and gravity to treat the water. Once completed, the system will restore one mile of stream and improve Montour Run for miles by removing an estimated 72,000 pounds of acid and 7,000 pounds of aluminum per year. The project was designed by BioMost Inc. and is funded by Range Resources, the U.S. Office of Surface Mining Reclamation and Enforcement, and the Foundation for Pennsylvania Watersheds.