On October 1, 1925, Charles Ames took off about 10:00 at night from Hadley Field in central New Jersey, bound for Cleveland. He was delivering mail as part of the country’s first air mail program. He was scheduled to refuel at Bellefonte in central Pennsylvania but never arrived. With the fog thick that night, no one saw him if he passed overhead, and perhaps he never saw the landing strip. But to the west, some farmers thought they saw a plane circling low and so on October 6, Aero Field near Clarion became headquarters for the most highly publicized search effort to date for a missing Air Mail Service pilot. It would not end well.
Clarion’s Aero Field didn’t see many dramatic nights such as this, but the event reminded people of the importance of the field. Clarion was one of the few way stations along the air mail route from New York City to Cleveland, and for a decade it was critical to the program. Locals realized its strategic importance too and helped improve and maintain the field and its buildings for the safety and comfort of those pioneering pilots before quickly changing technology passed it by. Clarion’s air field became Western Pennsylvania’s primary connection with the original U.S. Air Mail Service that eventually connected the east and west coasts.

Aero Field was located near the western edge of one of the most treacherous and challenging early air mail flight paths; over Pennsylvania’s Appalachian Mountains and Allegheny Plateau. Flying west toward Cleveland, an air mail pilot could land at Clarion to sit out a lake-effect snow storm. Heading east and facing foggy weather across central Pennsylvania, a pilot might refuel at Clarion in the event that conditions forced an attempt to fly non-stop through to New York City. Clarion’s Aero Field anchored Western Pennsylvania’s support for the original U.S. Air Mail Service by becoming a familiar refuge for pilots flying the dangerous Pennsylvania leg of the transcontinental air mail route, by maintaining community involvement when responding to unanticipated local challenges, and by meeting the Air Mail Service’s changing needs and requirements.

The Post Office Department took over air mail service from the U.S. Army Air Service in 1918. That August, Post Office officials hired pilots and organized test flights for the first scheduled air mail route to the west—from New York City to Chicago via Cleveland. Post Office leadership had a mandate from Congress and the business community to continuously improve mail service and reduce delivery time. The Post Office pursued air mail transport to offer faster service to users willing to pay a premium, not as a strategy for replacing railroad delivery and other forms of ground transportation. Air mail service was also a way to provide employment for returning WWI airmen at a time when there were few other opportunities in aviation.

The Air Mail Service was initially limited to flights between New York City and Washington, D.C., but those in charge believed air mail could prove its economic feasibility only over longer distances. Therefore, Post Office officials prepared plans to expand the Service westward, first to Chicago by way of Cleveland, and eventually from Chicago to San Francisco. Post Office executives projected in 1918 that air
mail delivery between New York City and Chicago would take about nine-and-a-half hours compared to the established 24 hours by train. Officials hoped air delivery between New York City and San Francisco could be accomplished in about 35 hours versus the existing 90-and-a-half hours by railroad.

Pilot Max Miller flew the first air mail plane in to Clarion, arriving from Bellefonte, Pennsylvania, on September 20, 1918, to assess the grass field’s suitability to support the route between New York and Cleveland. A Clarion newspaper soon reported on a "U.S. Official Bulletin" announcing the first east-west air mail route:

The New York - Chicago route will be laid out in three legs, the first from New York to Bellefonte, Pa., a distance of 215 miles, with an emergency station and machine midway at Lehighton [Pa.]; the second leg from Bellefonte to Cleveland, a distance of 215 miles, with an emergency station at Clarion, Pa., a distance of 87 miles from Bellefonte; the third leg from Cleveland to Chicago, a distance of 323 miles, with an intermediate mailing station at Bryan [Ohio].

Air mail flights over Western Pennsylvania began in mid-December 1918, but hasty preparations and a high rate of mechanical problems with the mail planes forced temporary suspension. However, work was already in progress to build airplane hangars in Pennsylvania under Post Office Department supervision at Clarion, Bellefonte, and Lehighton. William Lindley, a pilot with experience on the Air Mail Service’s New York City to Washington, D.C., route, was named Clarion’s first field manager, effective December 16, 1918.

Other than financing initial hangar construction, the Post Office Department had no funding to purchase and operate airports. Instead it relied on reaching agreements with local community groups that already controlled air fields. The Postmaster’s annual report for 1918 stated, "In the conduct of
... the preliminary work on the routes to be established ... the Post Office Department is receiving ... much local assistance from committees, individuals, and aero clubs."

To help sustain the field, Clarion-area citizens filed an application on November 11, 1919, to organize the Aero Club of Clarion, Pennsylvania. According to the application, the Club was formed "for the purpose of maintaining a field and hangar for aeroplane purposes." The application included a list of 122 individual and business contributors, with total initial pledges of $3,860.11

Despite the public's fascination with airplanes and stunt shows, most air fields were supported and maintained by "aviation enthusiasts," not by the community. In Clarion, however, community leaders sought public support, using the Clarion Aero Club as the mechanism, to show their support of, and to, the Post Office Department. Not every community used an aero club to rally support - Bellefonte, for example, used its local chamber of commerce - but every small town saw the economic advantage, let alone bragging rights, to maintaining an airstrip.

Air mail flights between New York and Cleveland resumed on July 1, 1919. The Post Office Department also pressed ahead with plans to extend air mail delivery all the way to the west coast. Anticipating the first coast to coast air mail delivery left New York on September 8, 1920, reaching San Francisco on September 11.

The Post Office Department soon issued a pocket-sized guide called *Pilots' Directions, New York--San Francisco Route (1921)*, which listed landmarks to guide pilots and presented basic information about the route and key landing sites. According to *Pilots' Directions*, a white cross distinguished the Clarion field, either on the landing field itself or on the roof of the field's red brick hangar. Noted as being east of town, the field was "large" but became soft after rains. Available services and supplies included long-distance telephone and telegraph service, gasoline, and oil. As far as notable landmarks for pilots, the guide highlighted the buildings of Clarion Normal School, a water tank on a hill within sight of the Clarion Aero hangar, and the county court house tower in town.

Early air mail flying was dangerous. The Post Office Department issued *Pilots' Directions* because the pilots relied almost entirely on visual navigation; when the Air Mail Service expanded westward from New York City in 1918 and 1919, the pilots had no maps to guide them. Air mail pilot Dean Smith recalled, "We did not rely on gauges and indicators; we flew by feel, noting the control pressures on our hands and feet, the shifting weight of our bodies, and the pitch of the singing wires." Terrain and variable weather conditions across Pennsylvania made reliance on visual reckoning in the early 1920s particularly challenging and risky.

After flying coast to coast in May of 1923, a military pilot recalled his flight across the state: "Pennsylvania is a very difficult State to fly over, as there are no straight lines from which to judge directions on the ground and the atmosphere is invariably misty and smoky. The rivers, automobile roads, and railroads wind in all directions and the cities are covered with smoke and hidden in the hills. The boundaries of farms and fields run diagonally in various directions and are rarely straight." The Clarion field's airplane hangar mentioned in *Pilots' Directions*, built in 1919 at the direction of the Post Office Department, was threatened by a powerful storm passing through the area on March 4, 1923. Wind
gusts dislodged a farmhouse roof a few miles from the field, lifted roofing slates from the county court house, downed trees throughout the area, and rendered the hangar unusable by shifting the roof structure to the point that the walls collapsed.\textsuperscript{18} By 1923, the Post Office Department had transferred ownership and control of the hangar to the Clarion Aero Club. Although the original hangar was built for about $6,000, the replacement cost would be at least $10,000.\textsuperscript{19} Nonetheless, the club was committed to replacing it, and by January 1924, in spite of the winter weather, local contractor Thomas Hartle was at work clearing away the damaged hangar and securing materials for a new one, which “will be pushed to completion at the earliest possible time.”\textsuperscript{20}

It was fortunate that Aero Club officers decided to rebuild the hangar. In an ongoing campaign to reduce point-to-point air mail flying time, Post Office officials initiated nighttime flying supported by ground lights between Chicago and Cheyenne, Wyoming, in August 1923. The lighting system included field lights and a beacon at each regular and emergency landing field, and route marker lights and beacons between fields.\textsuperscript{21} Soon, Post Office executives began developing plans to bring lighted night flying to the east. Having an active hangar in place, coupled with the Clarion field’s central location on the air mail route over Northwest Pennsylvania, ensured that Clarion’s Aero Field would be a primary emergency support field for night flying between New York City and Cleveland.\textsuperscript{22}

The Air Mail Service’s Eastern Division Superintendent John Whitbeck met in Clarion on January 17, 1925, with Aero Club representatives to discuss arrangements for transforming Clarion’s field for night flying. More field space would be needed to allow for a greater margin of safety for night landings—the Air Mail Service’s standard air mail planes throughout most of this period (converted World War I de Havilland DH-4s) had no brakes. The Post Office Department’s space requirement for night flying was about 70 acres for primary emergency fields.\textsuperscript{23} The Aero Club owned the hangar but only about 25 acres of land, so the Club needed to acquire more real estate. A new agreement between the Air Mail Service and the club outlined each party’s responsibilities. Although the club needed to expand the field to accommodate a runway of about 2,500 feet, the Air Mail Service would contribute to the cost of land clearing and grading and pay $10 per acre rent per year. Also, the Air Mail Service would arrange for, own, and maintain the most costly and complex components: the field boundary lights and a field beacon light.\textsuperscript{24}

Aero Club officers worked on three fronts to bring the field up to Air Mail Service standards. First, the officers resurrected the fundraising campaign that accompanied Aero Club incorporation in 1920. They fed promotional and news articles to Clarion’s two newspapers, noting that per-share membership fees were the equivalent of “pro rata ownership in the hangar and land. It has an asset of material value behind it.”\textsuperscript{25} Club officials then added new wrinkles, announcing that the public could buy membership shares...
On credit and naming those who contributed, with amount, in the local papers as an inducement for others to sign up. Second, for the required air field expansion, club officials identified two parcels of land bordering on the Aero Club’s existing 25 acres. Club officers negotiated the purchase of about 27 acres from a farmer owning land adjacent to the field and recorded the deed transfer in February 1925. Finally, Aero Club leaders increased the club’s authorized financial capital by amending its corporate charter.

John Whitbeck returned in mid-February 1925 to check on field preparations for night flying. He saw that work was well under way. At least 14 acres of timber needed to be removed. By late February, workmen made good progress in felling trees, removing stumps, and clearing underbrush to make way for grading, which extended into April and May. Air mail pilots began practicing night flying and testing the lighting system between New York City and Cleveland in June 1925. Tower-mounted beacon lights along the route were tested on the night of Tuesday, June 16. An eastbound daytime flight over Clarion arrived late that evening, just before dark, and then continued toward Bellefonte “guided by the brilliant lights” at the airfield. Nighttime practice flights and landings at Clarion occurred regularly in late June. Reporting on these events, a Clarion newspaper writer concluded, “The preparation for this so far as the Clarion field is concerned has been made quite perfectly.”

Mail-carrying night flights between New York and Chicago commenced on July 1, 1925. Two westbound flights leaving the New York City end from Hadley Field, New Jersey, departed about 7:47 p.m. and 9:48 p.m. Mail on two eastbound flights from Chicago was transferred to different planes with new pilots after arriving in Cleveland. The first plane departed from Cleveland before 11:00 p.m. and the second after midnight. Local observers in Clarion that night reported only one eastbound flight (before midnight) and one westbound (after midnight). A stiff wind out of the west challenged the night’s westbound flyers, but forced no landings at the Clarion field. The eastbound flight spotted over Clarion was probably air mail pilot Paul Collins heading from Cleveland to Bellefonte, with Collins eventually arriving at Hadley Field around 2:00 a.m. on July 2. The later plane flying westbound over Clarion was most likely air mail pilot James Hill in the second plane to leave Hadley Field earlier that evening.

Seventy 24-inch rotating beacon lights atop 50-foot towers, each emitting 2.5 million candle power (a measurement of light intensity at the source), dotted the route between Hadley Field and Chicago. The towers were spaced from 12 to 25 miles apart depending on terrain. Much smaller, four-lamp beacons mounted on a 3.5-foot concrete base were spaced between the tower-mounted beacons. Beacons on landing field towers revolved in one direction, whereas beacons between fields rotated in the other, thus allowing pilots to tell the difference. At the Clarion air field itself, in addition to a towered beacon, 24 small boundary lights circled the landing area, flood lights illuminated the hangar, and a gasoline-fueled Kohler generator supplied electricity.

Oufitted with instruments for gauging weather conditions, the Clarion field was a designated weather reporting station. As a primary emergency landing field, Clarion was connected by a dedicated telephone line to the Cleveland and Bellefonte fields. Pilots and field personnel could call ahead to Clarion before take-off to get an assessment of area weather conditions and thus modify flight plans as necessary. Field personnel at Clarion also checked weather reports out of Cleveland and Bellefonte and used a red-flare signal system shared by all emergency landing fields to warn pilots of bad weather ahead. Air mail pilot Wesley Smith probably took advantage of all of this on the night of July 12, 1926, as he flew westward toward Cleveland. Already aware of
reported rough weather ahead, Smith landed at Clarion and spent the night before heading on to Cleveland the next morning.37

Whether flying at night or in daylight with poor visibility, air mail pilots in the early to mid-1920s monitored elapsed flying time with a timepiece as one indicator of approximate location. Pilots also checked landmarks to estimate altitude and verify the accuracy of the airplane's altimeter, which operated using barometric pressure adjusted to sea level.38 A Clarion landmark aided pilots by providing both a time and altitude check. Completed in 1885, the Clarion County Court House, in the center of town, and a little over a mile west of Clarion Aero Field, topped out at slightly over 200 feet and supported a clock tower with lighted nine-foot dials facing in each of four directions. Pilots knew that the courthouse was almost exactly 1,500 feet above sea level, which meant that a visual check of the tower for time and altitude while flying by was good practice regardless of the weather.'9

The July 1925 launch of illuminated night flying between New York City and Chicago was a capstone achievement for the Air Mail Service. It was not only a remarkable technical milestone, enabling further improvements in service and reduced delivery time, but it also symbolically validated the Post Office Department's strategy of establishing a single coast to coast national air route backbone before setting up other inter-city air mail routes and before contracting with private sector air mail carriers. However, events soon muted this spirit of accomplishment as Clarion Aero Field became field headquarters for the most extensive and highly publicized search effort to date for a missing Air Mail Service pilot. Veteran pilot Charles Ames took off about 10:00 p.m. on October 1, 1925, from Hadley Field, New Jersey, bound for Cleveland. Thick, low-hanging fog surrounded Bellefonte before Ames' scheduled arrival there for refueling, and he was not heard from or seen that night.40

Two farmers near Punxsutawney, well to the west of Bellefonte, reported seeing a plane circling below the clouds around 1:00 a.m. Assuming that Ames continued on past Bellefonte, Post Office Department executives decided on October 3 to begin searching from the air out of Clarion's Aero Field as well as from Bellefonte.41 At the request of Assistant Post Office Superintendent C. F. Egge, Pennsylvania's Governor Pinchot ordered the state's National Guard commander to identify units to dispatch to Clarion for the search. John Whitbeck, head of the Air Mail Service's Eastern Division, directed four air mail planes and pilots to fly from Cleveland to Clarion to join the search.42

On October 6, Post Office Department officials moved search headquarters from Bellefonte to the Clarion air field, and Assistant Superintendent Egge arrived to continue overall command. Four veteran pilots then flying in the West arrived to join the search. Pilots in 12 planes based at Clarion began scanning the ground daily along the air mail route over Northwest Pennsylvania. Between 300 and 350 Pennsylvania National Guardsmen, some on horseback, and thousands of civilian volunteers searched from the ground across the wooded hills.43 Pilots and others organized a $500 reward fund, distributing flyers throughout the region to announce the offer to anyone locating Ames. Within a few days the reward grew to $1,000.44

Residents of the Bellefonte area did not give up hope; some organized a search party that started out early on October 11. They were not out long before spotting
Ames' wreckage with his body in the cockpit a couple of hundred feet from a mountain summit a few miles east of town. Recalling the steep mountain slopes that air mail pilots had to negotiate in and out of the Bellefonte air field, one aviation writer noted, "It had been argued that Clarion, some fifty miles west of Bellefonte, would have been a more logical choice for a terminal stop. The cruising range of the DH [air mail plane] had Clarion within its capability." The Clarion field's location, facilities, and community support marked it as an important Air Mail Service facility but by the late 1920s, advancements in aircraft technology and evolving postal strategy diminished its role. The aircraft industry introduced more powerful planes that flew longer distances between stops. In 1926, the Post Office Department began phasing out the DH-4 mail plane after purchasing several Douglas airplanes, customized for the Air Mail Service with greater carrying capacity, higher cruising speed, and an ability to fly longer between stops. Post Office management anticipated turning over the Air Mail Service to private carriers from its inception in 1918. The assistant postmaster general in charge of the service declared in 1922 that the department "does not feel that it should operate an air mail service any more than it should operate a steamboat service or a railway service only until such times as the commercial interests, of this country, are ready to step in and take over the burden." The U.S. Air Mail Act of 1925 (also known as the Kelly Act, for Pa. Congressman Clyde Kelly, chairman of the House Post Office Committee) authorized the awarding of mail contracts to private air carriers to transport mail and promoted creation of additional inter-city air mail routes. One of the earliest was from Pittsburgh to Cleveland in April 1927. It set into motion the creation of commercial air mail and passenger travel. The New York to Chicago stretch was the last
on the transcontinental route to be converted to private carrier. National Air Transport, Inc., took control of air mail operations on this segment on September 1, 1927. And so ended a chapter at Clarion.

A flyer of some note, Parker D. Cramer, had used Aero Field during the air mail heyday as a base for his private business which offered airplane parts and repair services, short commercial cargo flights, and flying lessons. After the field reverted to only local use, he moved on to attempting flights over the Arctic region to demonstrate time-saving routes between the U.S. and Europe. In 1931, Cramer died in a crash during one of his attempts, and Clarion's field was renamed Parker D. Cramer Airport in 1933. The airport saw some activity before and during World War II for military pilot training programs in connection with Clarion State Teachers College. Later, the field became privately owned and was removed from official aviation maps, but continued to be used by local flying enthusiasts through about 1980.

Eventually, Clarion Borough acquired about 15 acres at the southwest corner to develop Paul A. Weaver Community Park with ballfields, a picnic pavilion, and a playground. The rest of the field remains grassy and undeveloped, belying the years when this ground was one of only 14 coast-to-coast terminal and support fields for transcontinental air mail.

James Shultz, a Clarion native and graduate of Clarion University, is an independent researcher living near Richmond, Virginia.

2 “Airports and Airways—Clarion, Pa.,” Aviation XXI, no. 6 (August 9, 1926): 263-264.
4 Benjamin B. Lipsner, The Airmail: Jennies to Jets (Chicago: Wilcox and Follett Company, 1951), 99-100. The Post Office Department scheduled air mail flights in relation to railway mail transport schedules to form an integrated scheduling system sometimes referred to as “advance delivery” (Lipsner, pp. 150-151).
5 Kathleen Wunderly, Bellefonte and the Early Air Mail, 1918-1927 (Bellefonte: American Philatelic Society, 2007), 8-10.
6 “Air Mail Route to Start Early in December,” Clarion Democrat, October 31, 1918.
7 Leary, 70-72, Wunderly, 12-14.
8 “Aero Mail in Snowstorm,” Aerial Age VIII, no. 13 (December 9, 1918): 659.
12 Leary, 85.
15 Leary, 71.
18 “Destructive Wind Storm,” Clarion Democrat, March 8, 1923. 5.

Miss Pittsburgh, a Waco 9 airplane, made the first air mail delivery between Pittsburgh and Cleveland on April 21, 1927, as part of the Kelly Air Mail Act. It’s seen here at Bettis Field (now Bettis Atomic plant in West Mifflin) with pilots Dewey Noyes and Merle Moltrup. The restored plane, now in the collection of the Heinz History Center, is on display in the Landslide Terminal at Pittsburgh International Airport.

19“Air Mail Route to Start Early in December,” Clarion Democrat, October 31, 1918.
It is reported that Clarion's aviation field... “Clarion Democrat, January 10, 1924, 5.


It is reported that Clarion's aviation field... “Clarion Democrat, November 27, 1924, 5; “New York—Chicago Night Air Mail,” Aviation XIX, no. 2 (July 13, 1925): 40.

Clarion Aero Field,” “Clarion Democrat, January 22, 1925, 1; Leary, 175.

Clarion Aviation Field,” “Clarion Democrat, February 5, 1925, 4; “Authentic Aero Information,” “Clarion Democrat, February 12, 1925, 5.

Clarion Aero Field,” “Clarion Democrat, January 22, 1925, 5; “Aviation Field,” “Clarion Democrat, February 19, 1925, 1.


At the meeting of the Clarion Aero Club..., “Clarion Democrat, June 4, 1925, 5; Amendment to Charter, Aero Club of Clarion, Pa., Office of Recorder, Clarion County, Pennsylvania, recorded December 19, 1925.

Aviation Field,” “Clarion Democrat, February 19, 1925, 5; Leary, 207; “A force of workmen... “Clarion Democrat, February 26, 1925, 5; “At the meeting of the Clarion Aero Club..., “Clarion Democrat, June 4, 1925, 5.

Night Mail Lights,” “Clarion Democrat, June 18, 1925, 5.

Night Flyers,” “Clarion Democrat, July 2, 1925, 1.


Night Flyers,” “Clarion Democrat, July 2, 1925, 1; “Airports and Airways—Clarion, Pa.,” Aviation XXI, no. 6 (August 9, 1926): 263; “Last Saturday evening... “Clarion Democrat, February 18, 1926, 5.


Troops May Search for Missing Airman,” New York Times, October 6, 1925, 7; Wunderly, 54.


Wunderly, 55-56.

Davidson, 23.


Leary, 223-224.


Wunderly, 54.

The dedication ceremony is mentioned in “Well-Known Announcer to Handle Clarion Race,” The Franklin News-Herald, May 13, 1933, 6; and the field's rededication in “Pioneer Flier Given Honors,” Pittsburgh Post-Gazette, October 1, 1942, 43, included a high tribute to Cramer by Clifford Ball, regional aviation pioneer.