Serving in “deadening darkness”

80 years ago, the Northern Division achieved the impossible

—by Scott Norris

Following Imperial Japan’s devastating attack on Pearl Harbor in December 1941, the isolationist stance of the United States finally fell and the country joined the World War already in progress. Military planners soberly assessed continental vulnerabilities and supply chain needs for the US and its allies to fight in multiple theaters - and in both cases found Alaska to be a linchpin. The territory’s dependence on ocean shipping was a glaring weakness, and if Japan could control its islands, the entire North American west coast could be subject to surprise strikes. A defended corridor through Alaska, however, could pipeline supplies and weapons to the Soviet Union, China, and northern Europe.

While Canada had built a number of small airfields in the west, these were barely sufficient for “bush flying” and could only support light aircraft such as Cessnas. And the road network ended at Ft. St. John in northern British Columbia - with railroads hundreds of miles further behind. Experts were needed - quickly - to create high-capacity airports in rugged and cold conditions. Thankfully, there was one company to call with fresh, practical experience, that had already given thought to the problem.
Visiting the Museum

The NWAHC Museum is located inside the Crowne Plaza AIRE Hotel in Bloomington, MN, just south of MSP International Airport.

Current schedule: Thursday - Saturday, 11 am - 5 pm
Closed for major holidays.

Admission and parking are FREE. (Special events may incur a charge.)

Directions:

From the airport: Use METRO Blue Line light rail from either Terminal 1 or Terminal 2 southbound and exit at the American Boulevard station. The Crowne Plaza AIRE is immediately east, across the street from the station. Or, call for the free hotel shuttle from either terminal.

From the Mall of America: Take the METRO Blue Line light rail outbound; American Boulevard is the third stop.

In the Twin Cities Metro area: Head toward MSP International Airport. From Interstate 494, exit on 34th Ave. S. and go south one block to American Blvd. Turn left (east) on American and then immediately right into (and under) the hotel. The parking ramp is on the left - follow the signs for free hotel parking on the uppermost level (do not use spaces not reserved for the hotel) and cross into the hotel's second floor. You may need to buzz the door for entrance, as a COVID and safety protocol.

The museum is located on the third floor, above the pool area, and across from the Fitness Center.

Annual Membership

Membership is the main source of funding for the NWAHC; please join!

$30 level - receives REFLECTIONS digital edition early access via email
$35 level - receives REFLECTIONS print edition by U.S. Postal Service (U.S. mailing addresses only)
Boarding Announcements

From Director Bruce Kitt

We’re on final approach for the installation of the new Shopify system. While its installation is running late, all its components arrived in February, rather than later as originally forecast for June or July.

The two main museum projects, the cabin seat display and the gift store revamp, are also progressing. We have several seat display panel ideas that will require the expertise of an outside vendor and we’re actively searching for that source.

We are switching gears in our gift store. The NWAHC has been the fortunate recipient of many donations that include duplicate items and items that fall outside the scope of the museum’s collection focus, such as items that pertain to other airlines. We have tried to sell these surplus/collectible/vintage items at our annual October Airliner Show, but due to the quantity, and the difficulty in gathering, pricing, boxing, transporting them from Flying Cloud, and displaying them, they have begun to take up valuable storage space that should be devoted to the museum’s growing archive collection. This one-day-a-year plan has not, and is not, succeeding.

The board decided to capitalize on this untapped inventory and make them available in the museum gift store on a daily basis. Two display cabinets were brought in from Flying Cloud; one for the current line of new retail items, the other will be devoted to our vintage airline collectibles. Additionally, we now have a shelf for timetables and annual reports. The goal is to become a recognized stop that collectors and avgeeks recognize as a source of unique and desirable additions to their collecting interests. In addition to reducing storage needs, this will be another attraction to bring in visitors who, we hope, will also become new members. It’s also fun to try something new. CAVU.

Our work with Access Philanthropy to explore how the NWAHC can evolve has completed its first stage, and we’ve crafted a long-term vision statement that calls for more space to unify our archive with museum displays, put on regular programming, and better work with other Twin Cities aviation, cultural, and educational institutions.

That has led us to reach out to the Metropolitan Airports Commission to share our vision and see where they are in strategic planning. A first meeting has already happened with another scheduled for mid-April.

This is the NWAHC’s 20th birthday year; with careful planning and a bit of good luck we’ve made it through the pandemic with a solid ledger. Many aviation museums are also looking to the future right now with their hands out - we hope to share a compelling plan with you and other donors for not just another 20 years as-is, but to upgrade our museum into a cherished, must-see aviation destination.

From Editor Scott Norris

Winter might be the time for hibernation for polar bears, but none of that was happening around the NWAHC in the past few months.

Bringing the A330 World Business Class seats into the museum has started a chain reaction of movement among other exhibits. Construction at the Crowne Plaza AIRE Hotel has likewise pushed us to push display cases around for ceiling access. This has not only opened up space for the retail revamp Bruce discusses in his column above, but also for a new ‘Speed’ Holman display under construction now.

Shop online to support the NWAHC!

- Treasure hunt! We offer surplus materials and new apparel and pins for sale on eBay under the handle “cyberglitz” - the assortment changes every week!

- Buying on amazon.com? We all learned how convenient is can be this year. Sign up for Amazon Smile and 1/2% of every purchase is contributed to our museum. Use the link at smile.amazon.com/ch/41-2020975 to specify the NWAHC!

Interested in donating materials?

Please contact our collections manager, Bruce Kitt, at bruce.kitt@northwestairlineshistory.org with details of your items, photos if possible, and how we can reach you.

We are especially interested in items that help us tell stories or demonstrate concepts and procedures; records and correspondence; video, audio, and photos; training materials; and union communications. Items from Hughes Airwest & its predecessors, and Southern are especially appreciated.
We’ve discussed in recent issues how our museum needs to broaden its audience and membership beyond (mostly) former staff of Northwest and Republic, not just for the long-term mission of this organization but also the near-term desire for consistent funding to create new displays, handle new acquisitions and donations, digitize recorded media and documents, and to “take our show on the road” to events outside our museum’s walls. The simplest and most expedient way we can grow membership is by making it easier to sign up online! And that’s the reason why we are swapping our retail management system from Clover to Shopify - Clover can’t handle online transactions, while Shopify is the US’ #1 platform for e-commerce.

When we unlock the doors to shop.northwestairlineshistory.org within the next few weeks, we will launch with three branches of products for online sale: (1) Annual Memberships and Donations, (2) Downloadable media - starting with several feature-length videos created or distributed by the NWAHC, and (3) four collections of exclusive Heritage Logo collection merchandise.

The Heritage Series products will debut with shirts, hoodies, face masks, and scarves; travel gear such as bag tags and zipper pouches; drink ware; and office products like mousepads and notebooks. Our initial designs will feature the Hughes Airwest logo and “Sundance” color patterns, the 1970s North Central scheme, Southern’s 1970s “Flightmark” and ‘going your way’ tagline, and the original 1926 Northwest Airways logo and photos of vintage aircraft and route maps.

These logo products will be available online only, and fulfilled by US-based “print-on-demand” suppliers - your coffee mug or sweatshirt will be created one at a time, as your order is placed, and shipped directly to you. Most products will be crafted and in the mail within a week of your order, plus normal ground transit time. The North Central test products your author ordered (below left) were in his hands 1-2 weeks after pressing the “buy” button.

Print-on-demand is a great way for us to offer a broad selection of products without having to buy and hold inventory - or use our volunteers’ hours for packing up orders and waiting in line at the post office. We can see what items and collections sell well for only the investment of design time, and create new products or even whole collections quickly.

We are excited to launch this new endeavor and hopeful that it will vigorously contribute to the NWAHC’s bottom line!
**Take Off with Philanthropy**

*By Mike Vetter*

**What is Philanthropy?**

The practice of giving money, time, experience, skills or talent to help make life better for others. Anyone can be a philanthropist, regardless of income. And philanthropy does not look the same for every person.

There are many reasons that motivate people to be philanthropic:

- Personal cause (Donor is personally impacted)
- Family cause (Donor’s family member is impacted)
- Goal-oriented giving (intent to have funds accomplish something)
- Tax efficiency
- Legacy planning (long term impact)
- Incentivizing behavior
- Control
- Revenge

But I am not a billionaire… why should I be philanthropic?

- The U.S. is the most charitable nation in the world. In 2020, Americans donated $471 billion. About 30% of those donations occur in December.
- The largest source of charitable giving came from individuals. $324 billion, or 69% of total giving, came from private people in 2020. In five of the last six years, charitable giving by individuals has grown. Corporate giving decreases when the stock market is down, but individual giving does not rely on market conditions.
- Philanthropy can be a learned behavior. Adults are more likely to give to charity if their parents gave to charity. 86% of affluent households maintained or increased charitable giving amidst the 2020 Covid pandemic (net worth $1M + or income $200,000+). 93% of donations to charitable organizations that focus on education and the arts maintained (81%) or increased (12%) their donations in response to the pandemic.

**The Art of Planned Giving**

There are three approaches to gifting assets:

1. **Outright gifts: a one-time (or annual) donation**

   **Pros:**
   - Immediate cash flow for the charity
   - Legacy during life
   - Income Tax Deduction

   **Cons:**
   - Loss of control over how funds are used
   - No benefit to heirs
   - Limits on tax deductions

2. **Structured Giving Program**

   **Pros:**
   - Immediate and/or ongoing impact
   - Potential income and/or estate tax deduction
   - Retain some control over how funds are used

   **Cons:**
   - Gifts are irrevocable

3. **Testamentary Gifts**

   **Pros:**
   - Retain control and use of assets during life
   - Social legacy after death
   - Potential estate tax deduction

   **Cons:**
   - No impact on the organization or society during donor’s lifetime

In future newsletters, we will explore ways that you can contribute to the Northwest Airlines History Center that will benefit both the museum and your own personal finances and desires.
Northwest’s efforts through the 1930s in opening airports across rugged Montana and Washington and developing flying, safety, and engineering techniques to support mainline frequencies in cold-weather and mountain conditions created vital corporate know-how. Minneapolis, Montana, and Seattle were key logistics hubs along NWA’s direct route, and the company’s pilots were familiar with everything from the brand-new Douglas DC-3 down to light utility craft.

Beyond these assets, however, Northwest’s leadership had been carefully studying potential service to East Asia via Alaska, including conversations with the Lindberghs and a number of pilots who would go on to build their own aviation businesses there. The 1939 map at right already anticipates the corridor developments necessary for a landcraft-based network using the short Great Circle route (as opposed to Pan American’s reliance on amphibious aircraft and longer island-hopping solution.)

So it came as no surprise when the War Department called on NWA in January 1942 with a challenge to build, staff, and operate a 4,000 mile network across some of the most inhospitable terrain in the hemisphere. A contract was signed February 26 with the Air Transport Command.

A survey flight was quickly undertaken by Frank Judd, who would be given the superintendent title over NWA’s new Northern Division, flagging Edmonton, Alberta as the jump point northwest. Traffic would flow there from Great Falls, MT as well as Minneapolis. Actually, there were two ‘first flights,’ as Canadian officials in Edmonton hadn’t gotten the word from Ottawa - Judd had to leave and return the next day after diplomats finished their paperwork.

In less than three weeks, March 15, 1942, the first cargo flight departed MSP. The government absorbed six out of NWA’s then ten DC-3s and all four of its Lockheed 10A Electras for Northern use, and contributed additional C-47s (military DC-3s) and Curtiss C-46s. In addition to flying cargo and troops, NWA was contracted to “lay out routes, prepare range maps, establish and provide radio communication, and erect facilities.” This also included the training of military and Air Transport Command pilots and maintenance crews, fuel supply, and master scheduling for all other carriers feeding into the Northern pipeline. NWA even set up a training school at Billings, MT for ATC pilots.

Cargo came in many forms - aircraft engines and parts, lumber and steel, food and mail, explosives and ammunition, radio units and electric generators, road building equipment, and even trucks. Items too large to load in one piece were cut apart and reassembled at their destinations, such as several 10,000 gallon gasoline storage tanks, a 1,200 gallon fuel truck, and even a complete sawmill.

With the speed of deployment there was no time to build comfortable quarters and work facilities - the winter months were perpetually dark, with extreme blizzards and below-zero temperatures that lasted for weeks. Warmer weather only brought mud, mosquitoes, and biting flies by the millions. Buildings were not insulated, and quarters especially early on were simply tents. Water was untreated and disease swept the camps - but there was no time for rest, as the anticipated Japanese attack on the Aleutian Islands began June 3, 1942. Despite the enormous supply chain struggle, several Aleutians were overtaken - the supply surge had not yet reached that far.
The desperate situation and sheer mass of men and material led to improvisation and bending of rules: at Whitehorse, ‘Art’ Peterson faced difficulty finding space to set up a base. In his words, “when I picked out a location, I discovered it was impossible to buy any property in a hurry. This was not a time to quibble, so I simply took squatter’s rights to about 50 acres of Canadian government land. Croil Hunter and a group of company officials arrived a short time later on an inspection trip and Croil asked me, “Pete, do you have a lease on this property?” “Sure,” I said. “Let’s see it,” said Hunter. So I walked into the john, ripped off an armload of toilet paper, walked back and slammed it on the table. “Here’s your lease!” I told him.”

Northwest set up large maintenance bases not just at Edmonton and Anchorage, but also intermediate points of Fort St. John and Fort Nelson in British Columbia, Watson Lake and Whitehorse in the Yukon Territory, and Fairbanks, Alaska. In addition to the ATC cargo and passenger flights along the airway, NWA handled the transfer of many hundreds of aircraft for Lend-Lease distribution to mainly the Soviet Union, and also equipping the US Eleventh Air Force. These would include fighter planes like the P-38, P-39, and P-40, bombers including B-18s, B-24s, and B-25s, and other miscellaneous light duty and transport craft.

Several NWA crew lost their lives during the operation. Longtime Northwest Pilot ‘Red’ Kennedy got his start on the Northern Division and tells this story: “Johnny Hart and Ken Jones crashed on final approach to Watson Lake in February 1943 - about two miles short of the Watson runway, possibly because of severe icing, about 7:15 pm.

Mechanic Ted Swanson told me, “I heard the plane circling, but went about my business and realized I never heard it land.” We searched for that plane for more than two months before we found it, only two miles away. That’s how rough the terrain was up there. That’s what started us on the red tails.”
A couple other stories from ‘Red’ Kennedy:

“Nov. 2, 1942 I was transferred to Fort Nelson as mechanic-in-charge. As a 19 year old kid, I had a lot to learn about cold weather operations. Fort Nelson was the most undesirable station in the whole Northern Region. We lived in Army Stout houses made of fiberboard; they were 10‘x10’ and slept four, heated with kerosene stoves. We worked 12 hours a day, 7 days a week. No running water or inside toilets. I was there a year and a half.

“Soon came the deadening darkness of continuous winter. Temperatures often stayed at -40 or more and -50 was not unusual. We had much to learn about living and maintaining airplanes under these circumstances, and we did it, thanks in part to those wonderful Herman-Nelson heaters - a little bigger than a cedar chest on wheels. They burned aviation fuel or regular gasoline and were a blow torch inside. Heat was distributed by a blower through a 20-foot, 12-16” diameter hose. They took extensions too, but if you used one you lost heat. You’d fix up a nose hangar with tarp and bring the hose inside.

“If it was snowing out, especially wet snow, or if heavy frost was possible, we covered the wings and horizontal tail of incoming planes destined to be on the ground for a while with form-fitting fabric covers. Even with nose hangars, of course the wings and tail were exposed. This could be a mess, really fun in the wind. The wing man might actually take off himself!”

By the spring of 1943, the combined US and Canadian force in Alaska numbered 100,000. Combined air, land, and sea units moved against Japanese encampments in the Aleutians on May 11, and within three months all the islands were back in Allied control.

Also by early 1943 military staffing for aircraft maintenance and Air Transport Command logistics started to ease the pressure on Northwest crews. But Northern Division operations continued into 1945. When it was wound down, the Division had operated over 21 million transport-miles, 164 million passenger-miles, and almost 45 million ton-miles - numbers that would have been unthinkable for any of the Major carriers before the war.

Despite being under military command, and often wearing uniforms, Northwest’s staff weren’t eligible for military benefits until an act of Congress was passed in the early 1990s.

NWA’s corporate contributions did not go unrewarded - in June 1945 route authority was granted to New York City, making Northwest the fourth transcontinental carrier. Flights to Hawaii were approved the next year, as was the great prize of rights to fly through Alaska to Japan and East Asia. The 75th anniversary of trans-Pacific flying happens in July 2022, and we’ll cover that story in our June issue of REFLECTIONS.
Logos don’t speak for themselves (Part 5)

By Bruce Kitt

GAME OF PLANES

In Part 4 (Reflections, December 2021), contrary to Executive VP Malcolm MacKay’s statement that the Imperial Eagle would not be used in the livery of Northwest’s planes, it was. The following timeline may help in understanding how the question of the Imperial Eagle as a logo arose:

1/. June-July 1958 Northwest Orient Airlines News (NWON): The front page showed Pres. Nyrop holding a model of a Douglas DC-8 in Northwest livery. Unfortunately, his right hand obscures the -8’s vertical stabilizer. (Mentioned because, A/. it’s an early photo of a DC-8 in pre-delivery NWO livery, and B/. it may play into the following points). DC-8s were not mentioned in earlier 1958 issues of NWON and this photo is likewise silent on the jet’s future in Northwest’s fleet. The June-July newsletter was the final issue published in 1958.

2/. Jan-Feb 1959 NWON, page 1: Northwest orders five DC-8s and 10 Electra IIs. Page 4 of this issue carried drawings of each airliner, both with: red tails, a US flag, “NORTHWEST”, and either the name (Electra) or model (DC-8).

3/. In advance of the 1959 shareholders annual meeting, Northwest released its 1958 Annual Report:
   - The cover showed a drawing of the Lockheed L188 Electra II, featuring the Imperial Eagle.
   - Page 3: a DC-8 drawing with an early vertical tail livery – plus the Imperial Eagle. (Ref my earlier lament above).
   - Page 4: a photo of Northwest’s first Electra II, N121US, with only the Imperial Eagle and “NORTHWEST” on its vertical stabilizer.
4/. Starting with delivery of N121US in 1959, and culminating with N138US in 1961, Northwest’s 18 Electra IIs were delivered with the Imperial Eagle on their vertical stabilizers. (Illus. 18)

5/. Northwest’s first DC-8, delivered in May 1960, the following four Douglas DC-8s (1960-1961), the Boeing 720-051s beginning in 1961 and every airliner ordered thereafter – not one carried the Imperial Eagle.

ILLUSTRATION 19:
So much to absorb in this early Jet Age shot at Chicago O’Hare - the elegant Air France livery; the otherworldly boarding tubes pulled up and away from the departing Continental “Golden Jet” 707, the gleam and polish on NWA’s 720 and Electra II, and the complete lack of development off to the west of the field: United’s hangar complex was still years away. In the mid-2020s, this view will look over the new mid-field concourses being built as part of the Terminal 2 complete reconstruction project.
Absent a press release from Northwest, several conclusions can be extrapolated from the above. The technological leap from piston to jet was recognized as a seminal moment in commercial aviation’s development. This is a statement of fact from a number of Nyrop’s “President’s Corner” messages carried in NWON from 1957-1962. Recognizing Nyrop’s position in Northwest, every discussion regarding the Imperial Eagle as part of any logo design had to land on his desk. That the Imperial Eagle only appeared on Electra IIs may be indicative of a transitional phase rather than its future use as a fleet-wide livery logo.

The timeline offers another clue regarding the Imperial Eagle. The last airliner to display the Imperial Eagle, N138US, Northwest’s final Electra II, arrived in June 1961. Electras began leaving the fleet in 1966 and by 1972 they were gone. The DC-8s and their red tails entered and left service between 1960-64; Boeing 320s and 720s, with red tails, began arriving in May 1961, and the Electra IIs replacement, the red-tailed Boeing 727, landed in 1964. The July-August 1962 NWON called these red-tailed airliners by the nickname Northwest’s fleet became recognized as - Red Tails - in a sidebar on page 5. That article included drawings of each type of plane in the fleet and each had what would be red tails (it was in black and white). Notably, the Electra did not display the Imperial Eagle.

A fair presumption is that sometime after the final Electra II delivery in 1961, the Imperial Eagle was removed when each Electra went through heavy maintenance, standardizing their vertical stabilizers with the rest of Northwest’s fleet. This change is visible in the ORD airport postcard (Illus. 19) and JFK airport postcard (Illus. 20), plus the starboard side photo of N125US (Illus. 21).

To be objective regarding the question of whether the Imperial Eagle’s claim to be a legitimate logo is valid, one has to compare the ways in which the Imperial Eagle was employed, using the same criteria used to elevate the 1947 logo (Reflections, June 2021) as an acknowledged, legitimate logo:

• Both 1947 & 1959 logos appeared on an airplane/airplanes while in active service.
• Both 1947 & 1959 logos were used in print advertising, including timetables and annual reports.
• Both 1947 & 1959 logos appeared on union agreement books,
• Both 1949 & 1959 logos were stamped on cabin service flatware....and so on for numerous similar usages. By that matrix, the Imperial Eagle should qualify as a bona fide Northwest logo.

Saturday, October 8, 2022, 9 am to 4 pm

At the Best Western Plus Hotel in Bloomington, MN, across from the Mall of America. Admission only $5 (kids under 12 free): proceeds support the Northwest Airlines History Center. Free parking. Free shuttle ride from MSP Airport. Or use METRO Blue or Red Lines to the MOA. Hotel reservations (952) 854-8200. Table space (612) 386-5080 or bill@airlineposters.com.