

Special Locomotive Gets Presidential Paint Job

Air Force One has been grounded.

Well, not really. But should you see something resembling the presidential airplane hurtling along some railroad track, don't worry. It's just UP Locomotive 4141.

The new locomotive was painted in the Air Force One motif as a tribute by Union Pacific Railroad Company to the 41st president of the United States, George H. W. Bush. It debuted in November 2005 at the Bush Presidential Library & Museum in College Station, Texas, during the opening of a special exhibit, "Trains: Tracks of the Iron Horse." The exhibit explores the technological, social and economic history of the railroad industry.

"The Library contacted us a few years ago to see if we'd be interested in sponsoring the exhibit," recalls Bob Turner, Sr. VP-Corp. Relations at Union Pacific. "Our company had always had a good relationship with Mr. Bush, even before he became president. We thought that if there was going to be a big thing on railroads at that facility . . . it's an area we serve, a state that's very important to us, and for a man we admire . . . it just seemed that we were the right ones to sponsor it."

Union Pacific Railroad links 23 states in the western two-thirds of the USA and offers long-haul routes from all major West Coast and Gulf Coast ports to eastern gateways. It also connects with rail systems in Canada and Mexico. The company had donated the use of other



There were actually two Boeing 747s serving as Air Force One during the 41st president's administration.



UP Locomotive 4141 was painted in the motif of Air Force One in honor of former President George H. W. Bush.

"commemorative" locomotives several times in the past, including one that carried the "live torch" to Salt Lake City for the 2002 Winter Games.

The idea of painting the Bush locomotive in the Air Force One pattern evolved from conversations on ways to promote the exhibit. Says Turner: "We wanted the locomotive to have an impressive paint job that railroad fans would take note of and thus be prompted to visit the Library and see all the other things that are there. Our advertising agency came up with a number of options, and this idea of Air Force One's paint scheme made the most sense.

Powerful Image

"Air Force One projects the power of the USA very effectively, no matter which president disembarks from it. The 4141 locomotive really conveys that same image."

The train stayed near the Bush Library for three weeks, after which it went into service for UP in the Southwest. It's expected to run the rails for at least ten years, logging more than a million miles.

The selection of a paint system with which to coat the new locomotive was critical for several reasons. It would have to match the Air Force One colors. It would have to exude an extra luster to match its presidential purpose. And, it would have to prove a match for the various paint-threatening climates it would encounter.

The paint shop at Wisconsin & Southern Railroad in Horicon, Wisconsin was contracted to do the painting. They, along with their paint distributor, Kelly Industrial Coatings, Inc., of Waukesha, Wisconsin, recommended a two-part coating system from DuPont Industrial Coatings.

"Union Pacific wanted the best surface and finish possible," recalls Carlye Azzolina, office manager at Kelly Industrial Coatings. "We recommended DuPont's Imron®

(See other side)

UP Locomotive 4141

Continued . . .

polyurethane primer, followed by color coats of Imron® high gloss polyurethane and then a final clear coat of Imron® polyurethane."

"The Imron® primer is a sand-able primer that will give you a smooth surface for the best topcoat appearance. It is low in VOC's and HAPS, which makes it environmentally friendly. It's very flexible, and is fast-dry to recoat and handle."

Gerald Tjepkema, shop foreman at Wisconsin & Southern RR was behind the decision 100%. "My preference is to use Imron® not only for its durability, but also for the way it holds its gloss," he says. "And I love working with the material. The paint has very good 'hanging' capabilities, and levels off real well. It's a very user-friendly type paint."

To achieve the look of the Air Force One that carried President Bush #1 (actually, there were two planes in service), photos from the era were studied. Elements from the Boeing 747's wings and tail, including an American flag, were placed on locomotive 4141's rear panel, "with the sweeping lines of forward motion representing progress". (See photos.)

Easy Color Match

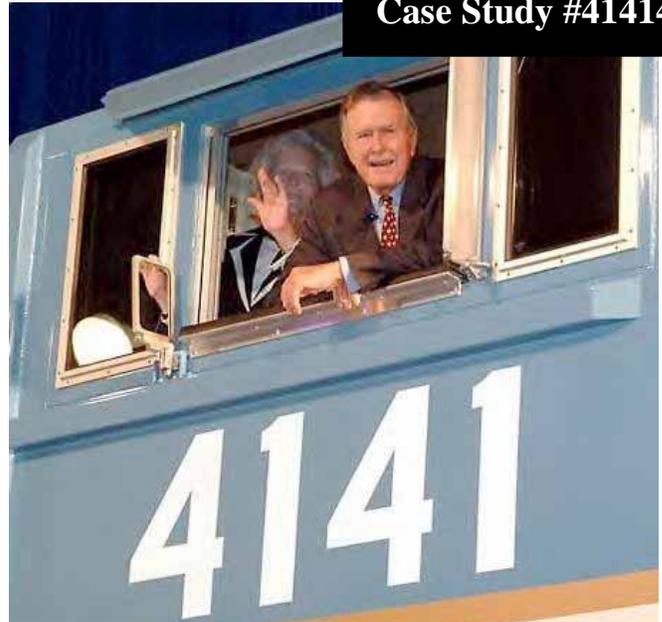
According to Azzolina, matching the Air Force One color scheme proved to be no big deal. "We would send panels of their color choices to get a 'yea' or 'nay' on the color until all the choices were confirmed," she says. "With Imron®, it's generally easy to get the colors right."

UP's Turner confirms: "I signed off on the final design of the color scheme. As to the color match, I think it's perfect."

It took Tjepkema's team at Wisconsin & Southern about eight days to prep and paint the locomotive. They sprayed the primer at two mils thickness, the color coat at one-and-half mils, and the clear coat at one mil. "The whole project went a lot easier just because the colors cover better, and the dry time is fast," he notes.

The result was a very glossy, hard-looking coating which, despite the hot Southwestern sun, will maintain its luster for years to come. "The DuPont Imron® color coats and clear coats both have excellent resistance to ultraviolet rays and hold up very well in all weather conditions," reports Azzolina.

How well? "I'd expect the lifetime of that locomotive's coating system to be ten to twelve years, minimum," she answers.



Mr. and Mrs. Bush took the UP 4141 locomotive for a spin . . . assisted by a Union Pacific conductor.

That jibes with Tjepkema's experience with DuPont Industrial Coatings. "We used to use other paints but now we've switched pretty much to Imron®," he states. "It's better to go with this material for its longevity, rather than other lower-cost paints that are out there. In the long run, you do get what you pay for."

The newly painted locomotive was delivered, wrapped in a tarpaulin, to a special station set up at the Bush Library. It was hidden behind a curtain until the official unveiling ceremony on November 7, 2005. Invited guests had no idea what they would see.

"It was almost surreal," recalls UP's Turner. "When the curtain was drawn, people seemed to be stunned. It was as pretty a sight as you could imagine. The next day President Bush actually took Locomotive 4141 for a spin, with the assistance of one of our conductors."

About UP 4141

Built by Electro-Motive Diesel, Inc. and valued at roughly \$2-million, the locomotive stands 15ft., 11 ins. tall and weighs 210 tons (with a full tank of diesel fuel). Its 4300 horsepower engine operates at 950 rpm maximum speed.

Certified under EPA regulations for Tier 2 locomotive emissions, it is one of the cleanest locomotives in the U.S. in terms of engine exhaust emissions. It's also equipped with an event recorder, equivalent to an aircraft "black box," which records more than 30 operating parameters including speed, direction of travel and control settings.



The miracles of science