

# On the Road Again

## Glacier National Park's Red Buses

In the early 20th century, most visitors to national parks arrived by train and then toured the parks on horseback or by stagecoach. As motor vehicles became more common, more visitors starting arriving in their own cars and buses replaced horses as the means to explore the parks. The style and type of these buses varied from park to park, and by the mid-1930s the National Park Service decided to standardize park-touring buses.

Specifications were developed, and buses from all major manufacturers were evaluated. The winning proposal came from the White Motor Company of Cleveland, OH. Its buses were designed by Count Alexis de Sakhoffsky, a famous industrial stylist of the time, and featured a rollback canvas convertible top. Each row of seats had its own door, and every window rolled down. Several hundred of the buses were built, with each park making minor changes in configuration and adopting its own color scheme. Yellowstone's buses were yellow, of course. The fleet for Glacier was painted a brilliant red and black. The buses served the parks (Bryce Canyon, Glacier, Grand Canyon, Mt. Rainer, Yellowstone, Yosemite, and Zion) well but began to disappear after World War II as visitors increasingly pre-

ferred to tour in their own cars. The buses faded from all the national parks, except Glacier.

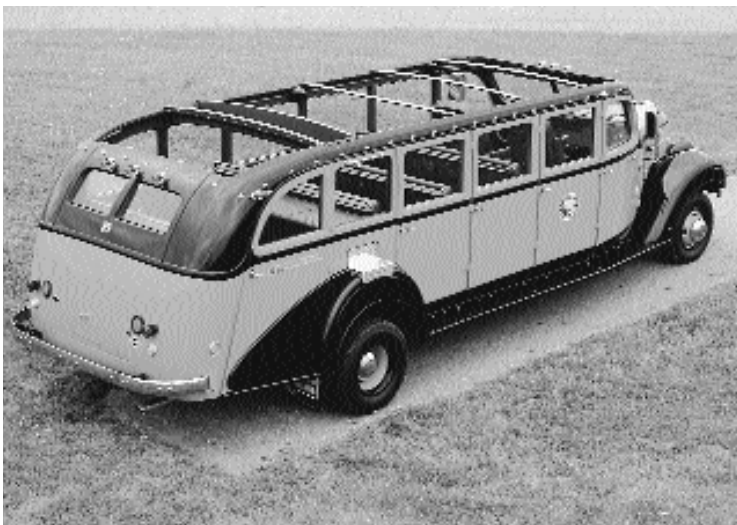
### *The "Reds" and the Sun Road*

The buses survived in Glacier because of the Going-to-the-Sun Road (Sun Road). Prior to the opening of the 50-mile trans-Continental Divide road in 1933, the only access to Glacier's pristine high country was by horseback or on foot. The Sun Road was acclaimed for its beautiful scenery and daring engineering, but many people feared the breathtaking drop along the road and found it hard to sightsee while driving. The Red Buses, or "Reds", were introduced in 1936-37 and quickly became the most popular way to experience the Sun Road. Everyone rode in them — including Clark Gable, Carol Lombard, William Randolph Hearst, and, more recently, then-Vice President George H. Bush, the Queen of the Netherlands, and Robin Williams. The Reds provided a memorable experience to every visitor and a reminder of when adventure travel was conducted with style and grace.

The Reds were also called "jammer buses," a reference to the days when they had standard transmissions and the drivers could be heard "jamming" the gears as they double-clutched along the precipitous Sun Road. Visitors loved the stylish buses and their drivers, who were affectionately nicknamed "Gear Jammers." Before long, it was hard to tell which was more popular, the Sun Road, the Reds, or the Gear Jammers!

In the summer of 1999, a combination of old age, metal fatigue, safety issues, and liability concerns caused the Reds to be pulled from service, replaced by contemporary 15-passenger vans. Glacier's 33 buses were believed to be the oldest sightseeing fleet in existence.<sup>1</sup> They are also believed to hold the record for the longest continuous service of any bus fleet in the U.S., and quite possibly the world. The oldest of the Reds had been on the road for more than 64 years.

*Red Bus Number 99, the 17-passenger buses feature removable canvas tops that can be rolled back for sight-seeing across the Continental Divide. Photo courtesy Ford Motor Company.*





*A heavy snowstorm moved the June 8, 2002, Red Bus “welcome home” celebration inside historic Glacier Park Lodge. Photo courtesy Glacier National Park.*

That same year, Glacier National Park completed a General Management Plan (GMP). Initially, public comments about long-term park management emphasized a desire for less development within the park. Midway through the 5-year planning process, a stronger theme surfaced: “Keep Glacier National Park the way it is. Don’t change it.” More than 7,000 public comments were received; the majority loved the natural beauty and tranquility of Glacier and also expressed strong attachments to the park’s human and cultural history, including the Red Buses. Fortunately for the Reds, park management was firmly committed to having the bus experience retained. Accordingly, the GMP states, “The red bus touring experience will be continued as part of the heritage opportunities for visitors to enjoy at Glacier National Park.”

#### **The Red Bus Team**

In October 1999, the park created the Red Bus Team. Made up of a small group of park employees and representatives from park concessioner Glacier Park, Inc. (GPI), the owner of the Reds, the team was charged with not only finding a way to return the Red Bus experience to Glacier, but also doing so in an economically feasible manner.

The team faced myriad complicated issues, including wheel-chair accessibility, retention of existing body components and design elements while addressing contemporary safety standards, and variations in size and components from bus to bus. Helping the team in the search for solutions were volun-

*Visitors to Glacier National Park ride Red Bus Number 107 (August 15, 1938) past the remnants of the annual 50- to 80-foot-deep “Big Drift” east of Logan Pass (elev. 6,646 feet) that is one of the final obstacles to opening the Going-to-the-Sun Road each spring. Photo courtesy Bayard Lawes, Transportation Design & Manufacturing.*



teer advisors like Barbara Pahl, Director of the National Trust for Historic Preservation’s Mountain/Plains Office; Bruce Austin, an aficionado of the White Bus Company sedans, and Don Durkee, Assistant Chief Counsel for the Federal Transit Administration (FTA). Equally important were collaborators from The Glacier Fund, Glacier National Park Foundation, the Propane Education and Research Council, Clean FuelUSA, Amerigas, the Montana Department of Transportation, and the Montana Department of Environmental Quality.

On top of the design, renovation, and mechanical issues, the team also had considerable financial challenges. The cost estimates were substantial—beyond what GPI could tackle on its own. The team searched for possible funding sources, but could not identify viable private alternatives. Furthermore, there appeared to be no public funding for a fleet of buses in private ownership, even if they were potentially the oldest, longest-running fleet of tour buses in the world. It began to look like the old buses might be relegated to museums, private collections, or junkyards.

#### **Finding Ford**

In 1999-2000, the National Park Service hosted four regional workshops for park managers and partners on alternative transportation technology and opportunities for developing partnerships with other agencies and the private sector. Representatives from the Ford Motor Company participated in the workshops and heard about the transportation issues – including the Red Buses – at Glacier. Ford visited the park in July 2000 to get a first-hand look at the problem and to talk to park managers, GPI, and alter-

*The Red Buses went through a complete refurbishment that included the installation of clean burning alternative fuel technology. Photo courtesy Ford Motor Company.*

native transportation consultants from FTA. The visit was a turning point. The Red Bus Team had a new partner – Ford Motor Company.

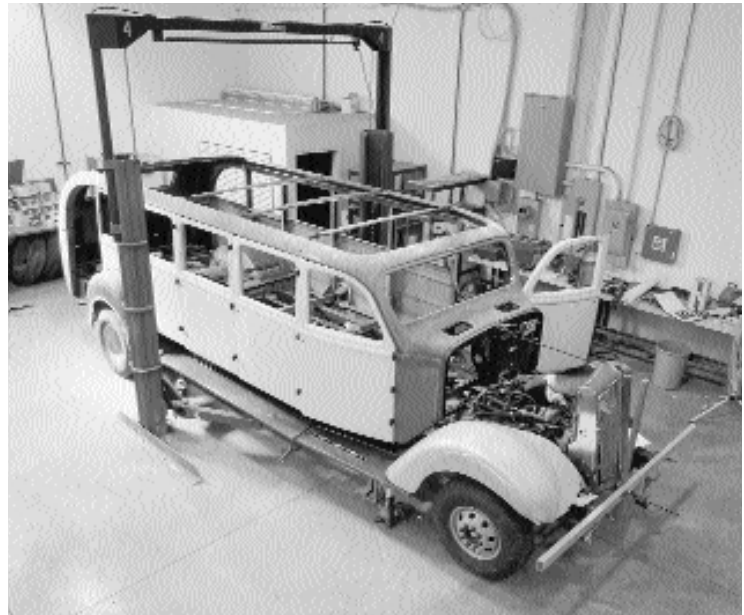
Later in 2000, Ford became part of the National Park Foundation’s “Proud Partner of America’s National Parks” program,<sup>2</sup> and the Red Buses became the company’s first Proud Partner project.

Red Bus “Number 98” went east to Inkster, MI, to begin an extensive engineering and design review to determine the feasibility of a chassis and engine retrofit for the entire fleet and how it could be accomplished while still preserving the historic character of the buses. A review like this had never been attempted before. With each new discovery came new challenges, often delays and uncertainty, but ultimately solutions.

The work on Number 98 was completed in May 2001. The newly-renovated Red Bus was unveiled at two public ceremonies in June 2001 — one in Washington, DC, presided over by Secretary of the Interior Gayle Norton, and the other in Glacier National Park, where 300 guests were regaled by the reminisces of 86-year-old Dr. Robert Wise, one of the original drivers of Number 98 in 1936.

Based on what was learned from the work on the first bus, a rehabilitation and refurbishment plan was devised for the entire fleet that included:

- a new Ford E-450 chassis stretched to original White bus wheel base

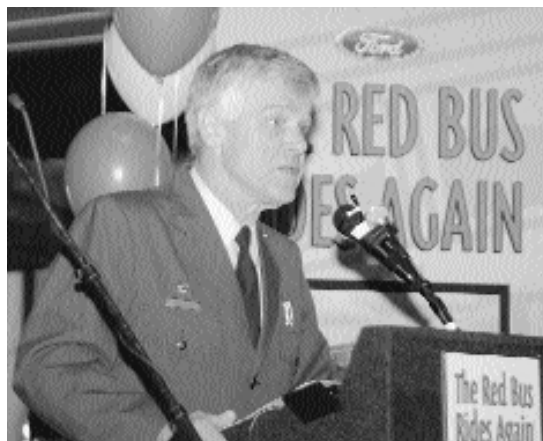


- an all-new 5.4L V8 clean-burning, bi-fuel powertrain using LPG (propane)
- a space-age (aerospace) aluminum honeycomb floor to increase strength and reduce weight
- a new-concept isolation “sled” to insulate body from chassis noise and vibration
- ergonomic seats for the driver and passengers
- lighter-weight rear door and body reinforcement
- upgraded glass and lighting
- an upgraded instrument panel
- a heater
- a body painted with environmentally friendly paint

The switch to the new clean burning fuel system reduced emissions by 93 percent, qualifying the vehicles for a ULEV (ultra low emissions vehicle) rating. To support the buses’ operation, Ford, in cooperation with Clean Fuels USA, installed two propane-refueling stations near the park.

The return of the renovated Reds to Glacier was celebrated in a snowstorm in June 2002. All of the buses will finally be home in December 2002. When they are, both the Red Bus experience and the buses themselves will belong to the American people. To begin the renovation process, GPI donated the buses to the National Park Foundation, which will transfer ownership to the National Park Service when all the buses have returned to the park. GPI will continue to operate the buses through December 31, 2005, the end of its contract with the park.

*Glacier National Park Interim Superintendent Pete Hart joined more than 500 guests, partners, and former “Gear Jammers” in celebrating the return of the Reds. Photo courtesy Ford Motor Company.*



*Snow forced the celebration inside, but after their lunchtime performance the Tropical Montana Marimba Ensemble got a first hand look at one refurbished Red Bus. Photo courtesy Ford Motor Company.*

The Red Bus project took more than 2 years and a team of over 200 experts from over six different organizations to make the dream of returning the historic Red Buses a reality. Ford completely renovated the Red Buses using new technology and its extensive expertise in alternative fuels. While preserving the exterior of the buses along with their historic charm, Ford used alternative fuel technologies to change the engine and drive-train, making them cleaner and quieter than the originals. Ford partnered with Transportation Design and Manufacturing (TDM), and more than 125 TDM employees in Livonia, MI, worked on the project.

The success of the Red Bus partnership relied on the dedication of each partner to a single goal — the return of the Red Bus experience to Glacier National Park. This common goal kept the partners focused through changes in deadlines, scope, vision, and key players. That being said, without the environmental leadership, vision, and generosity of Ford Motor Company, it is unlikely that the Red Bus fleet would have returned to offer visitors decades of unparalleled experiences on the Going-to-the-Sun Road.

The Red Bus project took a piece of Glacier's history and made it a part of our future. The incorporation of clean-burning, alternative fuel technology in the renovated buses makes them not only a tangible connection to preserving yesterday, but also a real commitment to protecting tomorrow. Glacier National Park is continuing this commitment and, along with the



park's neighboring stakeholders and communities, has begun the process of meeting the criteria to become a U.S. Department of Energy "Clean City"<sup>3</sup> neighborhood. Yellowstone National Park recently received this designation after nearly 5 years of work.

Across the Nation, the National Park Service is working with like-minded partners to explore transportation needs not only in national parks but also in the regions adjacent to parks. These efforts address the use of new technologies, fuel efficiencies, and low-emission tour vehicles. They are also looking at the possibility of wrapping these new technologies in a "retro" package, vehicles that resemble the Reds and the other old national park tour buses, yet meet all contemporary regulations, mandates, and environmental leadership goals.

The Reds have returned to Glacier National Park. The idea of the Reds can touch all national parks.

#### Notes

- <sup>1</sup> According to research conducted by the National Trust for Historic Preservation.
- <sup>2</sup> The National Park Foundation was chartered by Congress in 1967 to raise private support for National Parks and to build a broad community of people who care about their parks. The Proud Partner Program was created to enhance the National Park experience and increase awareness of how the parks reflect the heritage of all Americans.
- <sup>3</sup> The Clean Cities program enhances the Nation's energy security and air quality by supporting public and private partnerships that deploy clean-burning alternative fuel vehicles and a build their associated fueling infrastructure.

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*Heading into Two Medicine Valley, the view with the top down. Photo courtesy Ford Motor Company.*

