Amfleet Through the Years

by Elbert Simon Jr. and David C. Warner

The new standard. Where Pennsylvania Railroad GG1s and P70 coaches once ruled, two trains comprising Amfleet-I cars and AEM7 locomotives meet on the Northeast Corridor on March 11, 1997.Metroliner Service trains 105 (foreground) and 106 pass at Perryville, Md. The new wide-blue-band paint scheme (sometimes called the NEC scheme, though it was first applied on Viewliners) has begun to appear on equipment, though the old “Metroliner Service” logo is still in use. David C. Warner

Amfleet was a radical change from the earlier generation of lightweight cars acquired by Amtrak from its member railroads in 1971, but crews and passengers came to appreciate the new equipment's ruggedness and reliability, even while they may have lamented the loss of amenities such as large untinted windows and vestibule Dutch doors. Metroliner Service train 102 paused at Wilmington, Del., on June 21, 2000. David C. Warner

More than three decades have passed since Amtrak's first Amfleet cars entered service, in many ways a modern equivalent of the Pennsylvania Railroad's ubiquitous and rugged P70 heavyweight coach design. Amfleet's spartan form and durable stainless-steel construction—both cost-effective derivatives of the Budd Company's proven mid-1960s Metroliner design—gave Amtrak a versatile base from which a surprising variety of interior configurations has emerged.

A total of 492 Amfleet-I cars were delivered by Budd's Red Lion plant in suburban Philadelphia between May 19, 1975, and June 8, 1977. Apart from two groups of Turboliners for Midwest service, these cars represented Amtrak's first purchase of new passenger cars.

There were initially five configurations of Amfleet cars, based on two different body styles. There was a basic coach, in short- and long-distance versions. Then there was a food-service car with a snack bar offset near the center of the car. This came in a café version (seats at both ends), an Amclub (coach seats at one end and 2-and-1 club seats at the other) and an Amdinette (coach seats and booth-type seating).

Initially, Amtrak planned to obtain “long-distance” versions of each of the three food-service cars, and actually did acquire three clubs and three dinettes for its first “long-distance” Amfleet train, the Palmetto, introduced in June 1976. However, the balance of the proposed long-distance food service cars (nine cafes, 23 Amdinettes and 10 clubs) were delivered as “normal” versions and numbered above the existing cars.

Amtrak adopted two conventions with Amfleet—none of the new cars would be named and all would receive a five-digit number. (Names were later applied to several cars for San Diegan service.) Five-digit numbers had been relatively uncommon on passenger cars, but New York Central sleepers, SP diners, and MoPac deluxe equipment come to mind. Amfleet coaches would be numbered in the 21000 series, and food-service cars in the 20000 series.

Three separate orders were placed with the Budd Co.—initially for 57 cars, and then additional groups of 235 and 200. Budd set up three production lines —two of which turned out 361 coaches, and one which constructed 131 food-service cars.

"Barrelling down the Corridor" took on new meaning with the appearance of Amfleet. E60CH No. 974 leads an almost-all-Amfleet Colonial at Hanmans, Md., in September 1975. The locomotive and cars wear their original Amtrak color schemes. Dale Jacobson

By May 1976, Amtrak had decided to figureide the orders into 241 coaches (numbered 21000–21240); 120 long-distance coaches (21800–21919); 45 cafés (20000–20044); nine long-distance cafés (20575–20583); 27 Amclubs (20110–20136); 13 long-distance clubs (20675–20687); eleven dinettes (20200–20210); and 26 long-distance dinettes (20750–20775). (Sometimes the dinettes were identified as Amtaverns or Amlounges.)

Eastern long-distance trains acquired a new silhouette when Amfleet-I cars augmented HEP-equipped Heritage Fleet equipment. On Thanksgiving Day 1994, with a new Viewliner sleeper also in the consist, the Silver Meteor is ready to depart Winter Park, Fla. Eric S. Hillyer

Sharp-eyed readers will note that several differences exist between these car numbers and the final deliveries. As noted, the cafés were completed as 20045–20053, the clubs became 20137–20146 and the dinettes became 20211–20234 when completed as “normal” cars.

As for the coaches, the mix of normal and long-distance cars was changed several times, and finally ended up as 271 normal cars and 90 long-distance versions.

The final Amfleet-I number series, as built, were:

Qty. Series Type

54 20000–20053 Amcafe

37 20110–20146 Amclub

34 20200–20233 Amdinette

3 20675–20677 Amclub (*)

3 20750–20752 Amdinette (*)

271 21000–21270 Amcoach

90 21800–21889 Amcoach (*)

(*) Long-distance cars

Amfleet food-service cars were originally built in several variations that included an off-center snack bar. This creates a “long” end and “short” end of the car, each of which can be configured with different interior arrangements, as will soon be seen. Characteristically, they can be identified by the windowless area at the center of the car.

The first 57-car order included only 11 Amcafes, in which coach seats were included on both the long and short ends of the car. A wheelchair-accessible lavatory, and a wheelchair parking space were provided in the long end along with 28 two-and-two coach seats, and 32 coach seats were installed in the short end.

Subsequent orders included the Amclub configuration, in which 18 2-and-1 seats were installed in the short end of the car. Amdinettes were delivered with eight four-seat tables in the non-lavatory, long end.

Plans for “long-distance” Amclub and Amdinette cars were shelved after completion of three of each for the Palmetto. Amdinettes 20750–20752, accordingly, were renumbered to 20234–20236 in the summer of 1977. The

three long-distance Amclubs (20675–20677), however, became full club cars (club seats at both ends) in May 1977, but were not renumbered. “Split clubs” 20132–20136 were converted to full clubs (20670–20674) also in early 1977; the eight cars initially protected three Boston–Washington round trips.

Amtrak next modified the three lowest-numbered Amclubs (20110–20112) into “Ampub” lounge cars for the Montrealer in February 1978 to allow the conversion of this train to Amfleet. The numbers of these three cars were left unchanged.

The overnight Cincinnati–Washington Shenandoah was next to receive specially modified Amcoaches. Cars 21867 and 21882 were renumbered to 22900 and 22901, respectively, in May 1978 when two sleeping modules replaced several seats in the lavatory end of the cars. Eventually 10-6 sleepers replaced these cars, and after a short tour on the Boston–Washington Night Owl the cars were returned to their original numbers and configurations.

Severe winter weather in 1977 compelled Amtrak to replace conventional, steam-heated cars with Amfleet (with only Amdinettes to provide food and lounge service). In early 1980, Amtrak rectified this condition by converting eight cars (dinettes 20200–20204 and pubs 20110–20112) to diner-lounges 28300–28307. They would run on several trains over the next few years, e.g., the Inter-American and the City of New Orleans. These cars had large tables at the “dining” end and smaller informal tables at the other.

Amtrak had replaced certain Metroliners with Amfleet equipment while the assigned multiple-unit equipment was being rebuilt to “Metroliner-II” standards. Initially these Amfleet-equipped trains were pulled by GG1 electrics with modified bearings (and a power car for HEP)—later AEM7s took over. As things developed, Amtrak was less than thrilled with the results of the Metroliner-II rebuilding, and identified a group of cars to be refurbished for Metroliner Service in 1983–1984. (Additional cars were added over time

as Metroliner Service expanded.) The dressing rooms were removed to allow up to eight additional seats.

Long-distance Amcoaches so identified replaced the middle digit “8” with a “9.” For instance, 21800 would become 21900. Likewise, Amdinettes 20905–20916 were renumbered from 20205–20216, and club cars were renumbered 20970–20977 from 20670–20677. Additional full clubs were converted as required from split clubs and numbered upwards from 20978.

The three Amclubs that were modified into “Ampubs” for Washington–Montreal service gave the Montrealer a bit of cachet. Aboard the northbound train in the spring of 1978, travelers ride out the last hours of morning in Vermont aboard one of the newly modified cars. Mike Shafer

The delivery of Superliner-I cars and HEP conversions of Heritage-fleet coaches reduced the need for long-distance Amfleet-I coaches. As a result, 15

were converted to higher-capacity cars, and numbered 21271–21285 between 1984 and 1989.

The next major program began in 1986, and involved the addition of trainlines to permit push-pull operation. (Former Metroliner electric MU cars were modified to serve as cab-control cars.) New number series were established—the first two digits of coaches were replaced with "44," leaving the last three digits unchanged. Likewise, Amcafes exchanged their former "20" first two digits for "43." Long-distance coaches were now assigned to Business Class or Custom Class service. Later, dinettes and clubs so converted received a "48" instead of their original "20" first two digits. Three groups of cars were converted, initially for San Diego service, then Atlantic City, and finally Chicago-based trains.

Realizing that additional cars would be required to incorporate ADA-compliant lavatories, Amtrak undertook a project in the mid-1990s to include these features in cars refurbished at the Bear, Del., shops. Unlike earlier projects which incorporated a portion of the car's original number (e.g., 44900 was formerly 21900), these new programs assigned new numbers to cars roughly in the order the cars were outshopped. Surviving cars of this program are in the 21600 or 44600 (conventional seating) or 21700 and 44700 (Business Class) series.

Meanwhile, food-service cars were also receiving attention. A new series of "full table" cars was established beginning with 28350 or 43350 (again, the latter series was push-pull equipped, while the former wasn't.) These cars now had tables at both ends of the snack bar and incorporated a few earlier conversions that had retained their older numbers — now they received new numbers to indicate their actual layout.

Early Amfleet-I assignments in the Midwest included the Wolverine, shown arriving at Chicago from Detroit in the late 1970s. The shortie baggage car was typical in that period. John Leopard

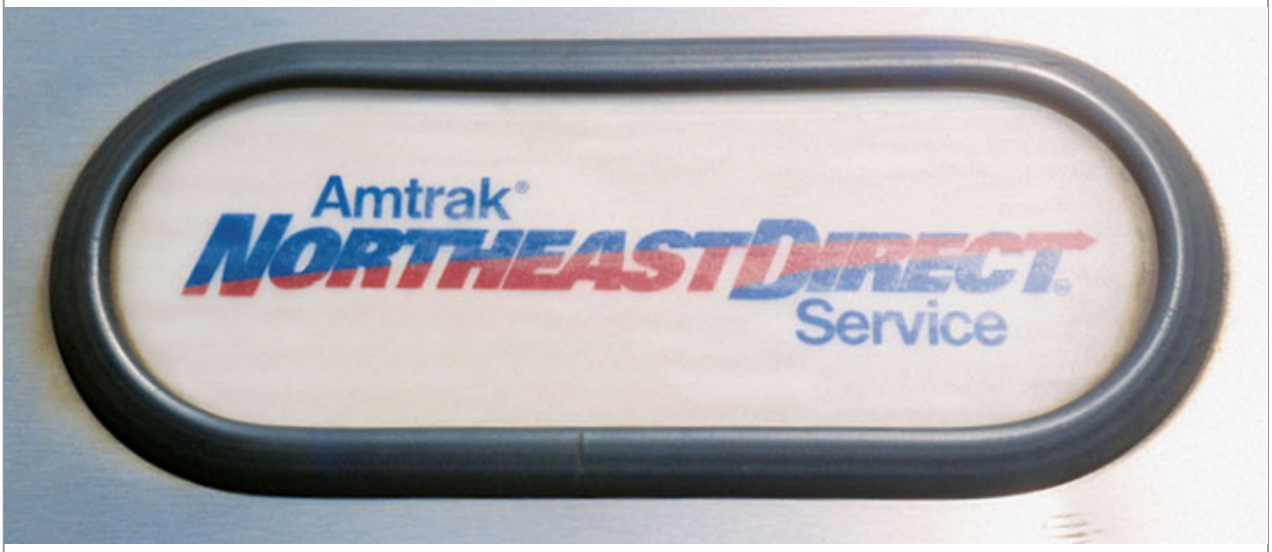
Three such cars were modified for use on the Boston–Newport News, Va., Twilight Shoreliner in 1997, and renumbered into the 28390 series. All have been subsequently refurbished and renumbered once again.

The other current type of Amfleet food-service car is the club dinette, in which one end of the car is equipped with booth seating and the other is laid out with 2-and-1 Business Class seating (originally intended to be First Class before Amtrak discontinued this service.) Five of the original ten cars were converted from “split clubs” that had been previously refurbished for Atlantic City service.

FL9 No. 487 leads a four-car Empire Service train north through a snowy Garrison, N.Y. , on Feb. 12, 1994. Howard Ande

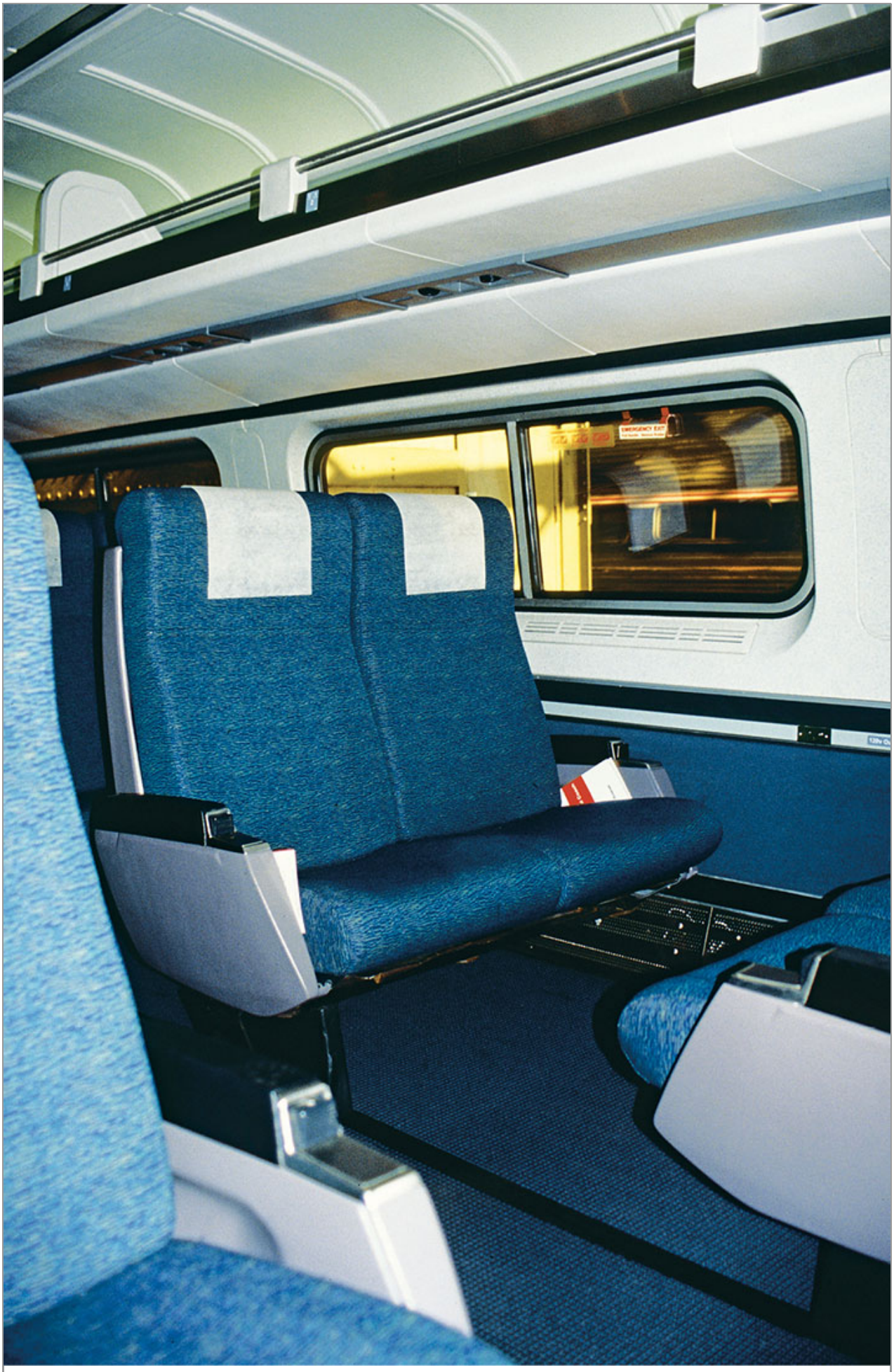
A goal of the “Capstone” program was to simplify the number of Amfleet car configurations that had evolved over the years, while upgrading the service as a companion to the new Acela Express soon to be introduced as a replacement for Metroliner Service.

The first 15 or so Capstone cars of 1999 could only be identified externally by a reflective red stripe at floor level. Subsequent cars received window-area graphics evoking the “color blobs” on the new Acela Express trainsets. This was a short-lived graphic application, however, and the cars were soon restored to the more conservative “Northeast Direct” livery of dark blue window band with narrow red and white stripes at the upper portion of the window area.



An Acela Regional train at Providence, R.I., in July 2001 features a rake of Amfleet cars sporting the blue-and-turquoise Acela-based livery. At this time, some Amfleet cars still carried “Northeast Direct” indicators. Mike Shafer

Business-Class cars are numbered in the 81000 or 81500 series, coaches are in the 82000 or 82500 series, and the aborted “Bistro” cars, now stored, are in the 85000 and 85500 series. For all three car types, the middle digit indicated whether the car was equipped with a trainline for push-pull service (5) or not (0). Many of the 82000-series cars are receiving a second overhaul (Level 2) and concurrently acquire trainlines and a new number.


EMERGENCY EXIT

The thoroughly modernized interior of an Acela Regional “Capstone” Amcoach rebuild, at Harrisburg, Pa., in November 1999. George Fletcher

With the approach of the new Acela Express trainsets, Amtrak discontinued offering First Class service on NEC day trains. Accordingly, a number of the new Capstone coaches were completed with 62- or 64-seat Business Class configurations.

A crisis in 2005 that required the removal of the high-speed Acela Express trainsets for brake disc modifications resulted in the temporary conversion of some “split club” cars into full club cars for use on substitute Amfleet-equipped Metroliner consists. As the brake systems were repaired, and the trainsets were restored to service, these cars were converted back to split club cars.

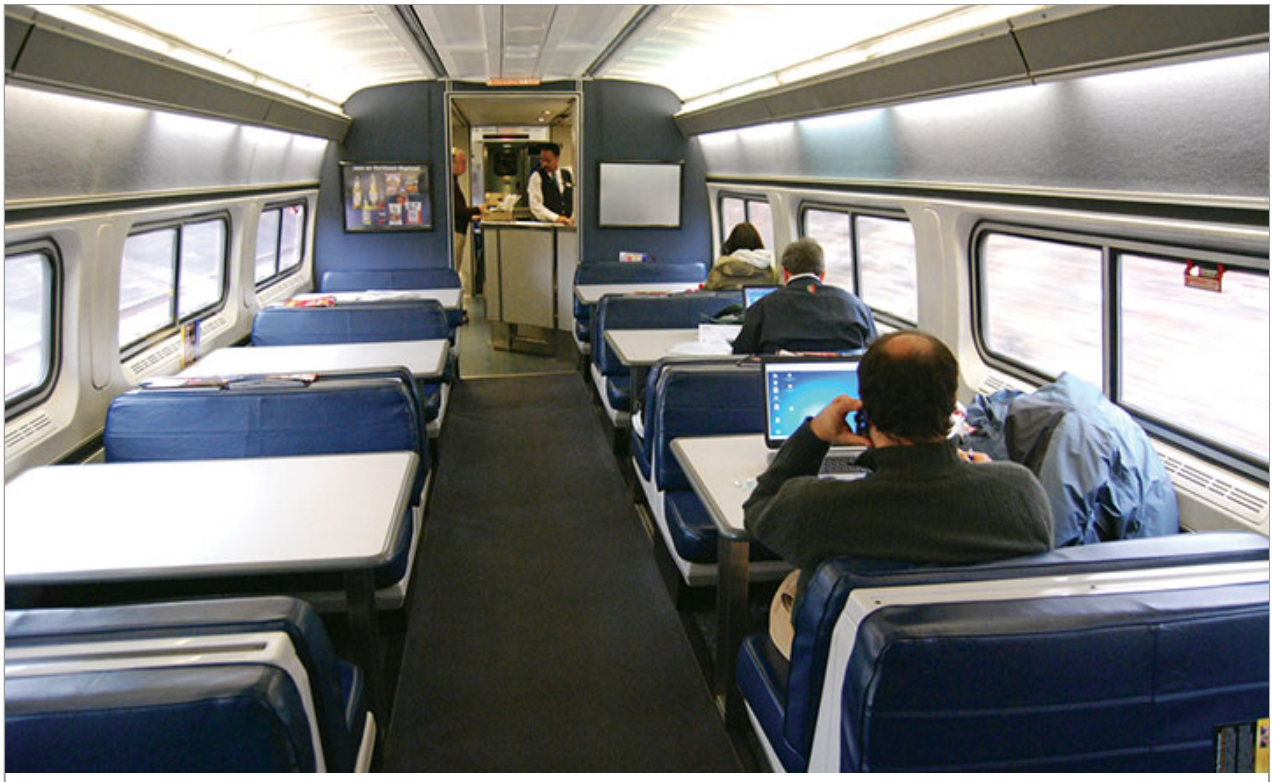
Easily, the most glamorous members of the Amfleet-I family are the two company-service cars, 10001 and 10002. Both were rebuilt from wreck-damaged coaches. Number 10001 Beech Grove (nee 21222) was converted in May 1984. It features a classic business-car layout, with three bedrooms, a dining area, and rear observation room with an open platform. Number 21191 was resurrected in June 1985, becoming No. 10002 Corridor Clipper to serve as a track geometry and inspection car.

An interior view of café 48155 on Amtrak train 66, the Twilight Shoreliner, on Feb. 12, 2000. Three cars were modified for this short-lived assignment. George Fletcher

Three levels of overhauls are currently (2009) being performed on Amfeet-I cars. Level 3 overhauls result in a car's conversion to Capstone standards, with a new number being assigned. As of late 2008, the overhauled cars had reached No. 82750 (starting from 82500). Level 2 overhauls are performed on existing Capstone cars. No work is done on trainlines; i.e., if a car does not have this capability, it is not added, and no change of number results when the car is released from the Bear shops. Level 1 overhauls are more limited, and are generally performed on food-service cars, though this level of overhaul may be performed on coaches in the future.

Capstone and other upgraded cars now have blue seat upholstery in a variety of patterns. By Thanksgiving 2008, only a few "red seat" Amcoaches

remained in service. The interiors of these cars had not been appreciably upgraded, despite their advanced age. These cars were randomly assigned to trains, and included Nos. 21002, 21065, 21104, 21118, 21193, 21194, 21214, 21267, and 44234 (nee 21234). Based on observations over the 2008 Thanksgiving weekend, cars 21065, 21104, 21118, and 21214 had the earlier Northeast Direct livery, and No. 21193 still sported a Northeast Direct logo. Almost certainly this was the last holiday season for these cars in their red seat configuration. Indeed, in early December 2008, No. 21002 entered the shops for a Level 3 overhaul.



An Amcafe refurbished for newly upgraded “Northeast Regional” service in December 2008. Karl R. Zimmermann

Approximately 20 former Business Class cars survive, but they are rarely used in that capacity. They can routinely be found on longer-distance NEC services such as the Vermonter. One of these cars, 21955, has not received ADA modifications. This car sports the last Metroliner Service logo; reportedly the

logos on both the 21193 and 21955 are maintained for trademark retention reasons, not a deliberate attempt to confuse the riding public.

The future

The few active Amfleet coaches not already upgraded to Capstone standards will almost certainly be included in the Level 3 overhaul program along with coaches that had been part of the New Orleans Evacuation Fleet (sidebar). This will permit an increase in cars available for NEC service.

Beyond this, emerging state-supported corridors may well use Amfleet cars that are currently stored (but not wreck-damaged). Since these cars offer various configurations of food service, a number will have to be converted to coaches. There is a prototype for such conversions, No. 82999, rebuilt from café car 43015 (nee 20015) in September 2005. While the conversion was not cheap (due to adding windows in the center section of the car), such rebuildings would be faster and less expensive than waiting for the delivery of new equipment.

In the not-too-distant future—2015—Amfleet-I cars will begin to reach their 40th year of service, a point where equipment is often considered for replacement. The all-stainless steel construction that was Budd's hallmark could permit continued operation, however, until marketing, mechanical, and financial considerations require their replacement. Indeed, the Port Authority Transit Corporation is embarking upon a program to rebuild their 40-year-old Budd-built rapid transit cars because the carbodies have held up so well.

Amfleet-I car layouts

Amfleet-I cars all have vestibules at each end, and measure just over 85 feet in length, a typical lightweight intercity passenger car length. They are just over 12 feet high and 10½ feet wide.

By definition, the “A” end of the coaches is where the two lavatories are located. Originally, these were two rather cramped spaces with doors that opened inward, making things even tighter.

Over the years, various programs replaced one of the lavatories with a larger, ADA-compliant facility with a sliding door. These programs began with the 21600-series conversions in 1995. Today, virtually all active Amfleet cars have gone through the Capstone or similar upgrade programs, and have much-improved lavatories. One lavatory is ADA-compliant and the other, while still small, is a bit larger than the original design and has a sliding door to improve mobility.

Originally, Amcoaches were laid out with 21 rows of four-across (2–2) seating for a total of 84 seats, a density considered acceptable for the relatively short runs for which they were originally intended. Ten seats were lost in the conversion of the 21600 series to include ADA-compliant lavatories and a wheelchair travel location. Today’s Capstone Coach Class cars have 70 seats, while the Business Class cars nominally have 64 seats.

The number of food-service cars required has declined as Metroliner Service was replaced by Acela Express trainsets, and other trains were re-equipped with new or different cars, e.g., Horizon and Superliner equipment, Talgo trainsets in the Pacific Northwest, and the Pacific Surfliners between Goleta/Santa Barbara and San Diego. Coaches were always in shortest supply, and thus tended to be reassigned and refurbished in greater numbers.

Amfleet-II

MAY 1, 1981

Introducing —

Amfleet II

150 NEW Coach and Dinette-Lounge Cars

LOCOMOTIVE HAULED

Built for Amtrak

By the Budd company

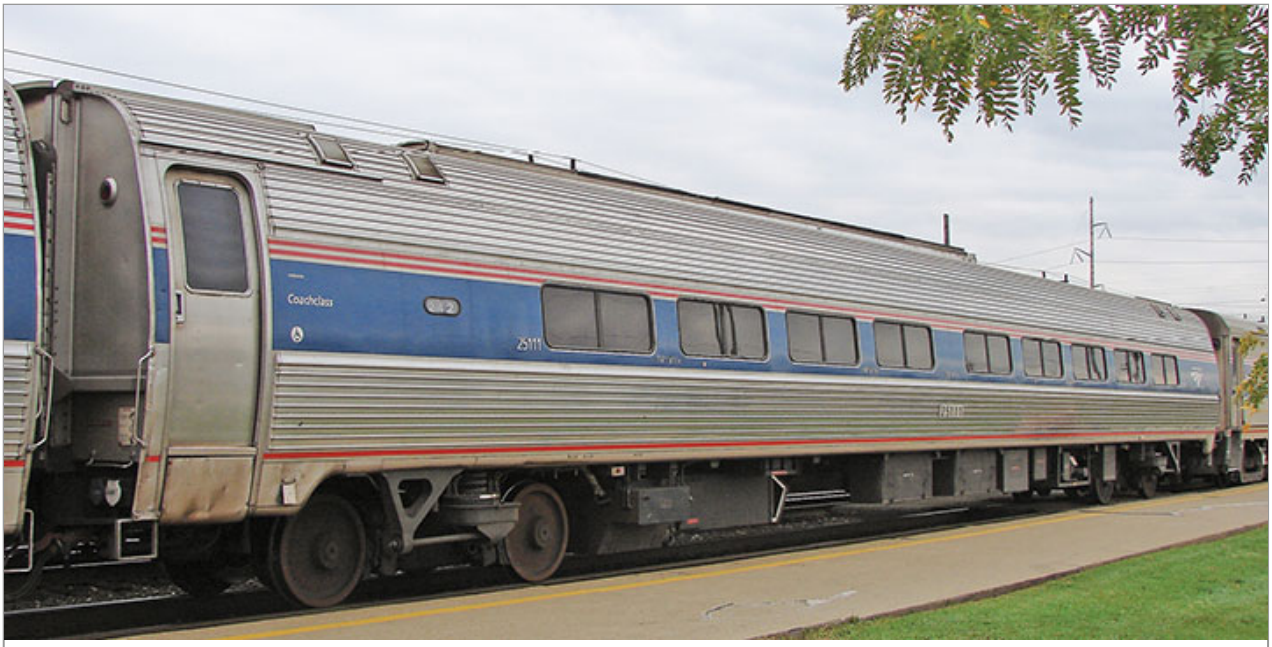
Amtrak marked its tenth anniversary with the introduction of Amfleet-II for long-distance service. Kevin J. Holland collection

The Amfleet-II cars came seven years or so after their older brothers. The most obvious differentiating features include a single vestibule and somewhat larger windows. Their story isn't quite as full of configuration changes, modifications and renumberings.

The 125 coaches (25000–25124) included 59 legrest seats with a wheelchair-accessible lavatory and wheelchair parking space. Two lavatories were installed at the vestibule end of the cars, and these have been receiving interior upgrades similar to those applied to Capstone Amfleet-I cars. Unlike Amfleet-I, however, these cars are not being renumbered when upgraded.

For a time, a few cars included a floor-mounted luggage rack that required four seats to be removed. While so modified, the cars were renumbered by replacing the second digit, "5" with "6." For example, 25002 became 26002. All cars have since been restored to their original configuration and number.

The 25 food-service cars featured a snack bar in the same location as on Amfleet-I cars. Eight four-seat booths were installed in the non-vestibule end of the car, and 17 seats arranged around small tables were installed in the vestibule end. In 2002–03, several cars had the lounge area replaced with an enclosed, not quite hermetically sealed smoking room. Cars so reconfigured received city names, such as Philadelphia Club.



Amfleet-II coach 25111 was running on the Lake Shore Limited at Depew, N.Y., in September 2007. Kevin J. Holland

In 2006 a program was begun to convert all the Amfleet-II food-service cars to a “Diner Lite” configuration as part of a Congressionally mandated cost-saving effort. This program should be completed by the end of the current fiscal year. The “Diner Lite” conversion includes provisions for additional storage, enhanced food-preparation equipment, and a conductor’s office. Where present, the smoking lounges were removed. The requirement to maximize seating in four-seat booths has resulted in the unfortunate consequence that some of the tables do not line up with windows.

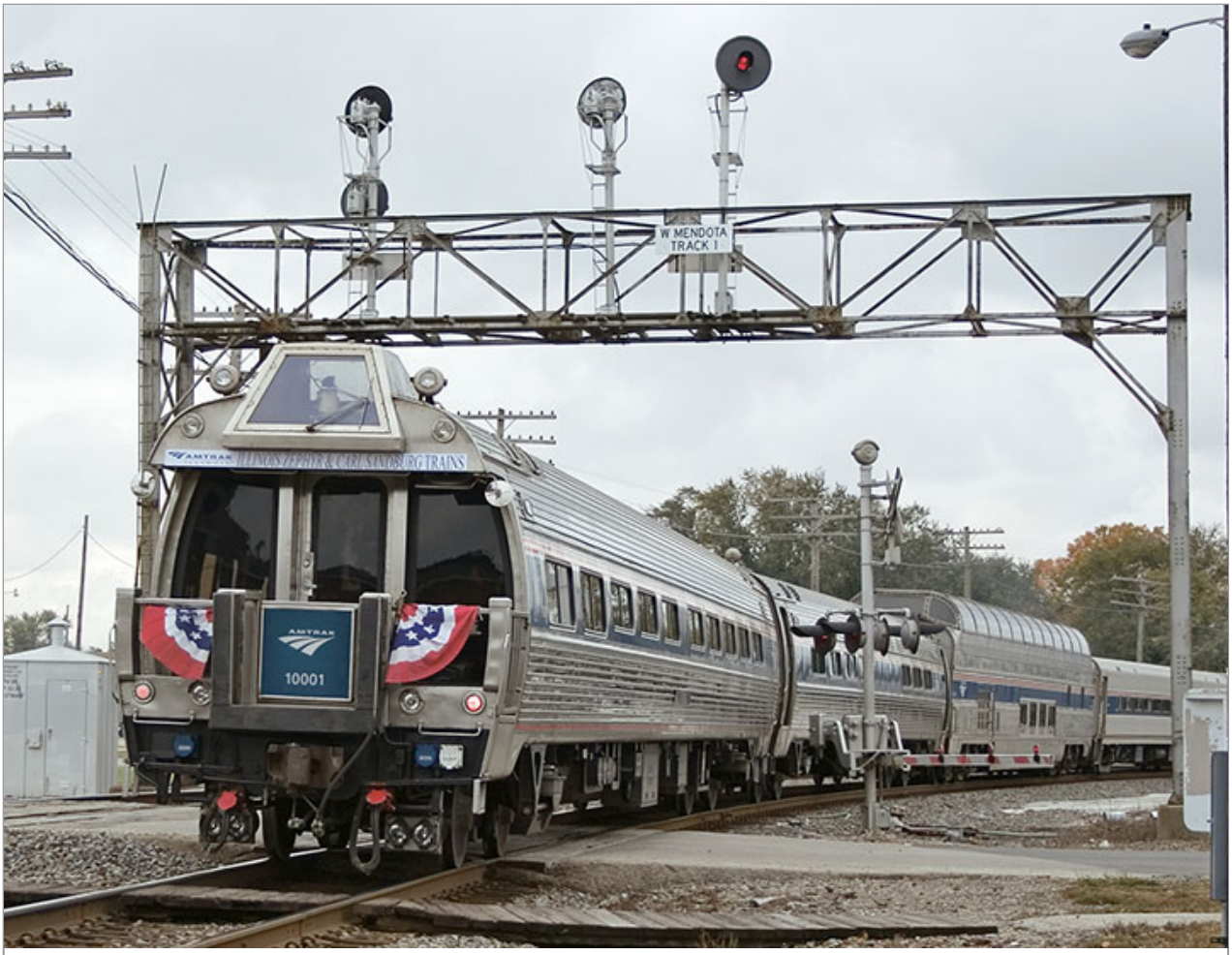
Both series of Amfleet cars were derived from the Metroliner electric MU cars —a point emphasized where cab cars, converted from former Metroliner equipment, are visually similar to the rest of the Amfleet-equipped consist. Although such cars once ran in a number of markets, today they are limited to Keystone service and Springfield (Mass.)–New Haven shuttles.

Amfleet cars are maintained at Amtrak's shop in Bear. Access to the facility is provided by Norfolk Southern's Delmarva Secondary that joins the NEC at Davis Interlocking in Newark, Del. When necessary to move cars from around the system to Bear, equipment is brought to New York City and attached to the Pittsburgh-bound Pennsylvanian, currently the only train that changes motive power in Philadelphia, providing time for Bear-bound cars to be pulled from the train. A transfer job takes the equipment to Amtrak's motive power shop in Wilmington, Del.; from there, a daily (as required) transfer run provides the move for the final 20 miles to Bear.

Of the 492 Amfleet-I cars built, 471 were still on Amtrak's roster at the end of fiscal year 2008 (Sept. 30, 2008). This includes quite a few stored cars, as discussed earlier. A larger percentage of the Amfleet-II fleet still exists—123 of the 125 coaches and all 25 food-service cars are active or awaiting repairs.

In early 2009, Amfleet cars can be found in service from coast to coast and in every region of the country. Even where new equipment has supplanted their regular assignments, these reliable cars are still used to fill in on Midwest, California and Pacific Northwest services.

Despite outward appearances, Amfleet cars are not all alike. They have evolved since their introduction over three decades ago, and will continue to serve Amtrak passengers for the foreseeable future.



Beech Grove, rebuilt in 1984 from Amcoach 21222, can be seen across Amtrak's system, often heralding new services (above, on the new Chicago–Quincy Carl Sandburg) and hosting on-line VIPs. Note in this photo that the rearmost side windows are of Amfleet-II size. Erik Rasmussen

The authors wish to thank Chris Jagodzinski, Amtrak's Senior Director-System Operations, and Bruce VanSant, Director-System Operations, for their help in compiling the data contained in this article.

The New Orleans Evacuation Fleet

The following 24 cars were assigned to "evacuation fleet" duty, and moved to New Orleans during July and August 2006. In some cases a car's COT&S date exceeded the four-year legal requirement, but Amtrak obtained a waiver from the FRA to use these cars on a short-notice evacuation train. These cars were not being carried on Amtrak's roster as "active," and had been stored dead or in wreck-repair status prior to this assignment. In December 2007 the cars were removed from New Orleans as the lease to keep them there had expired. They were moved north on the Crescent on eight consecutive trains from 12/1/07 to 12/8/07. Upon their return to Delaware they initially went to the locations listed below. In 2008, Amtrak began Capstone upgrades to some cars; by the end of the year, one was completed and four were in progress.

Number	2007 Location	Notes
21006	Bear	
21018	Wilmington	Capstone conversion 12/08
21021	Wilmington	
21027	Wilmington	
21034	Bear	
21045	Wilmington	Capstone conversion 12/08
21051	Bear	
21099	Bear	
21112	Bear	
21117	Wilmington	
21123	Bear	
21124	Wilmington	

Number	2007 Location	Notes
21134	Bear	
21137	Wilmington	
21140	Wilmington	
21151	Wilmington	
21153	Bear	Converted to 82745, 11/08
21164	Wilmington	
21165	Wilmington	Capstone conversion 12/08
21167	Wilmington	
21169	Wilmington	
21181	Wilmington	Capstone conversion 12/08
21189	Bear	
21195	Wilmington	