Turboliner Memories

Online Museum

RTG I – Group 1
(1973-1981)

RTG I – Group 2
(1975-1981)

RTG II
(1987-1994)

RTL I
(1976-1995)

RTL II
(1995-2002)

RTL III
(2003-2004)

The focus and purpose of the Online Museum is to present a sampling of surviving physical artifacts from the Turboliner story; items that are also part of a specific historical collection. In addition to those shown here, a number of other pieces of Turboliner memorabilia are also known to be "out there." The photos in this section of the website are used to show both the artifacts themselves, and the original contexts in which the artifacts were used. The Online Museum segment is intended to complement the detailed Turboliner history given both visually and textually in the two Turboliner books.

Online Museum Exhibits—In Order of Appearance

Chicago-St. Louis RTG I (Group 1) Preview Trip (September 28, 1973)

Chicago-Detroit RTG I (Group 2) Preview Trip (April 19-21, 1975)

New York City-Buffalo RTL I Preview Trip (September 18-19, 1976)

Turboliner Operation and Maintenance Manuals

Turboliner Visually Portraying Timetables and Brochures (National, Midwest Regional, Eastern Regional)

Turboliner *Express* Magazine Covers

Turboliner Posters

Turboliner Food and Beverage Service

Turboliner Tickets

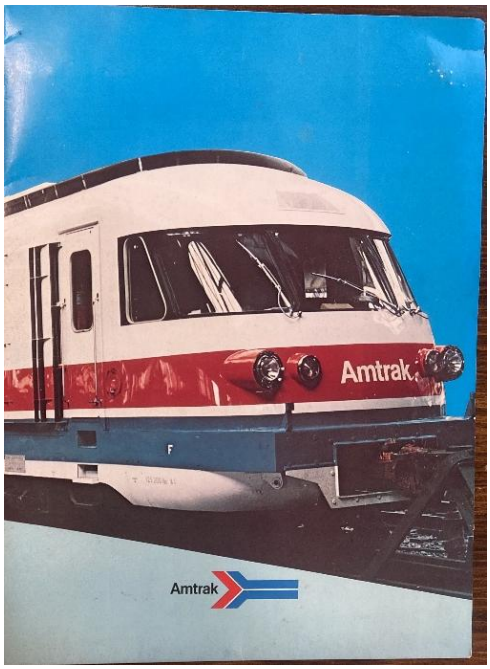
Turboliner Equipment Artifacts

Turboliner Scale Models

Chicago – St. Louis RTG I (Group 1) Preview Trip

September 28, 1973

Upper photos show the Preview Trip train during a one-hour stop at Springfield, Illinois. From left to right, the views include: Springfield station platform, interior of food service ("Bar-Grill") Car 94, and cab interior of Power-Coach Car 63. Lower left photo shows coach interior during travel between Springfield and Alton. Lower center and right photos were taken during the Alton, Illinois station stop.



On the Chicago-St. Louis Preview Trip, 9x12 inch (closed size) press kit folders were given to passengers. Inside, each folder contained: (1) four separate "Amtrak News" releases (General information on Chicago-St. Louis Turboliner service; "Background on Amtrak's French Turbine Trains;" information on the two-day Preview Train event; and information on a new conventional equipment train, called the "State House," which would operate on the days each week the Turboliners were off duty for scheduled maintenance; (2) An 8x10 photo of an RTG Turboliner at Pittsburgh, Pennsylvania during the train's New Jersey to Chicago delivery trip; and (3) a promotional information and schedule card for the new Chicago-St. Louis revenue Turbo Service that was slated to begin on October 1, 1973. Also distributed during this event were "Ride the Turbo!" buttons (shown at the top of the previous page), and, on a limited basis, copies of the first Turboliner poster (shown in the Turboliner Posters section of this Online Museum).

Chicago – Detroit RTG I (Group 2) Preview Trip

April 19-21, 1975

Kalamazoo

Ann Arbor

Dearborn

Detroit

Amtrak photos

During this multi-day preview event, route-specific press kit folders similar to those shown in the Chicago-St. Louis Preview Trip section were distributed. "Ride the Turbo!" buttons, with an appropriate "1975" date, as shown at the top of this page, were also available. As shown in the accompanying photos, an estimated 30,000 people walked through the new Turboliner.

New York City – Buffalo RTL I Preview Trip

September 18-19, 1976

Amtrak NEWS

National Railroad Passenger Corporation
955 L'Enfant Plaza North, S.W.
Washington, D.C. 20024

Saturday, Sept. 18

Turbine Train #1 (eastbound)

Buffalo	open	8:30 a.m.
	departs	10:40 a.m.
Rochester	arrives	11:55 a.m.
	departs	1:25 p.m.
Syracuse	arrives	3:30 p.m.
	close	5:30 p.m.

Turbine Train #2

On public display Grand Central Station, New York City, 1:00 to 4:00 p.m.

Sunday, Sept. 19

Turbine Train #1 (eastbound)

Syracuse	departs	8:15 a.m.
Rome	arrives	9:00 a.m.
	departs	9:40 a.m.
Utica	arrives	10:00 a.m.
	departs	11:15 a.m.
Amsterdam	arrives	12:20 p.m.
	departs	12:55 p.m.
Colonie	arrives	1:50 p.m.
	departs	2:50 p.m.
Rensselaer	arrives	4:00 p.m.

Turbine Train #2 (northbound)

New York City	open	8:30 a.m.
	departs	9:15 a.m.
Croton-Harmon	arrives	10:10 a.m.
	departs	10:55 a.m.
Poughkeepsie	arrives	12:00 p.m.
	departs	12:40 p.m.
Rhinecliff	arrives	1:00 p.m.
	departs	1:40 p.m.
Hudson	arrives	2:25 p.m.
	departs	3:20 p.m.
Rensselaer	arrives	4:00 p.m.

(Eds. note: The above inaugural schedule is offered for your guidance and for the convenience of the public. It will be adhered to as closely as possible. However, like all "special" schedules, it may be subject to minor internal adjustments to avoid interference with regular passenger train operations.)

Frank Klock photo, CNY NRHS collection

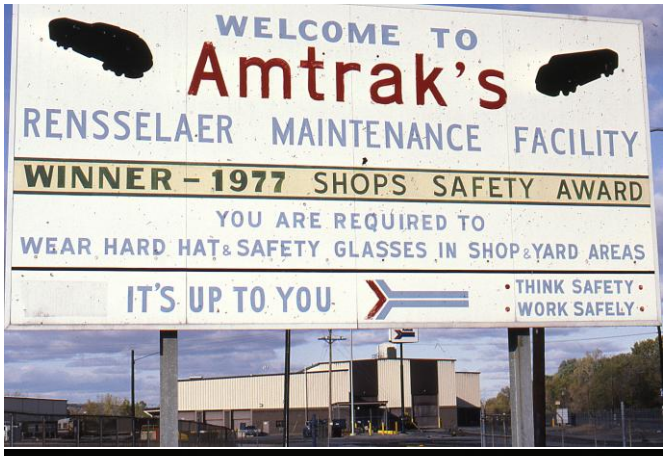

Amtrak photo

Jim Shaughnessy photo

Amtrak photo

As can be seen from the inaugural event schedule on the previous page, one RTL I Turboliner headed eastward from Buffalo, while the second trainset traveled west from New York City. Each turbine-powered consist made public inspection stops along the route, and the trains met at Albany-Rensselaer for the gala inaugural celebration. The top left photo shows the westbound Turbo prior to departure from Grand Central Station in New York City. The top right photo shows the same train pausing for visitors at Rhinecliff, New York. In the center photo, both trains meet at Albany-Rensselaer, with the Buffalo-originating consist on the left. The lower photo shows the inaugural ceremony, with New York State Transportation Commissioner Raymond Schuler addressing the crowd.

Turboliner Operation and Maintenance Manuals



Routine servicing, components replacement, minor to moderate repair, and limited rebuilding took place at Amtrak's two Turboliner maintenance facilities. Brighton Park, located in Chicago, Illinois, dealt with the RTG I trainsets used on the five Midwestern routes; while the Albany-Rensselaer, New York facility addressed the needs of RTL I, RTL II, RTL III, and RTG II equipment used on New York State Empire Corridor routes which operated between New York City and Buffalo/Niagara Falls, and between New York City and Montreal. Each of these shops possessed very detailed instruction volumes containing all facets of information needed to carry out virtually any work necessary to keep the Turboliners operating with a very high degree of availability. An example of such a shop manual is shown immediately below; in this case a 264-page work relating to the Astazou IV A-type turbine engine which provided auxiliary electric power in the RTG I trainsets.

ASTAZOU IV A
GAS TURBINE ENGINE

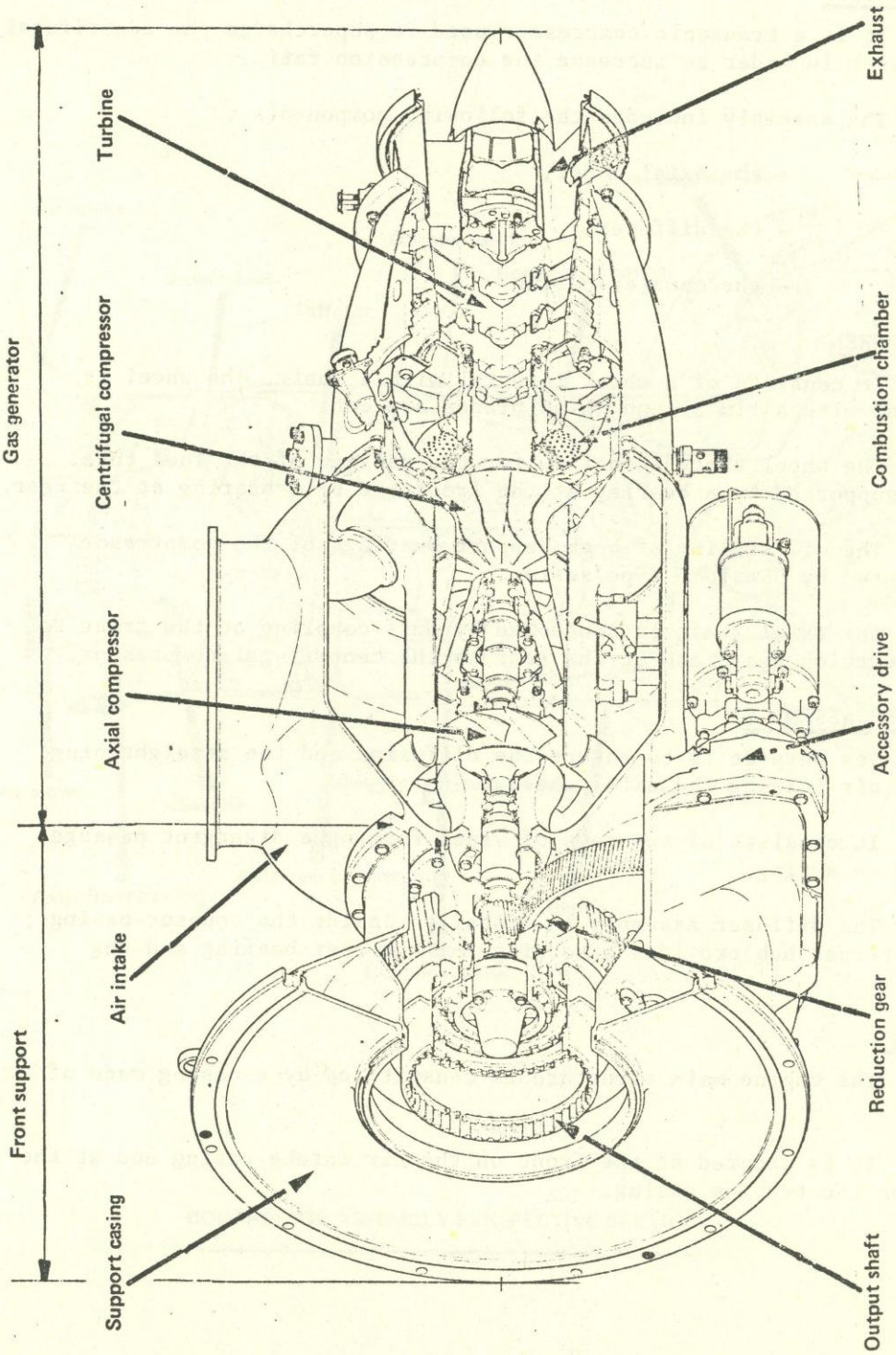
INSTRUCTION MANUAL

OFFICE OF THE CHIEF MECHANICAL OFFICER
955 L' ENFANT PLAZA NORTH, S. W.
WASHINGTON, D.C. 20024

NRPC-CMO-106 (3-76)

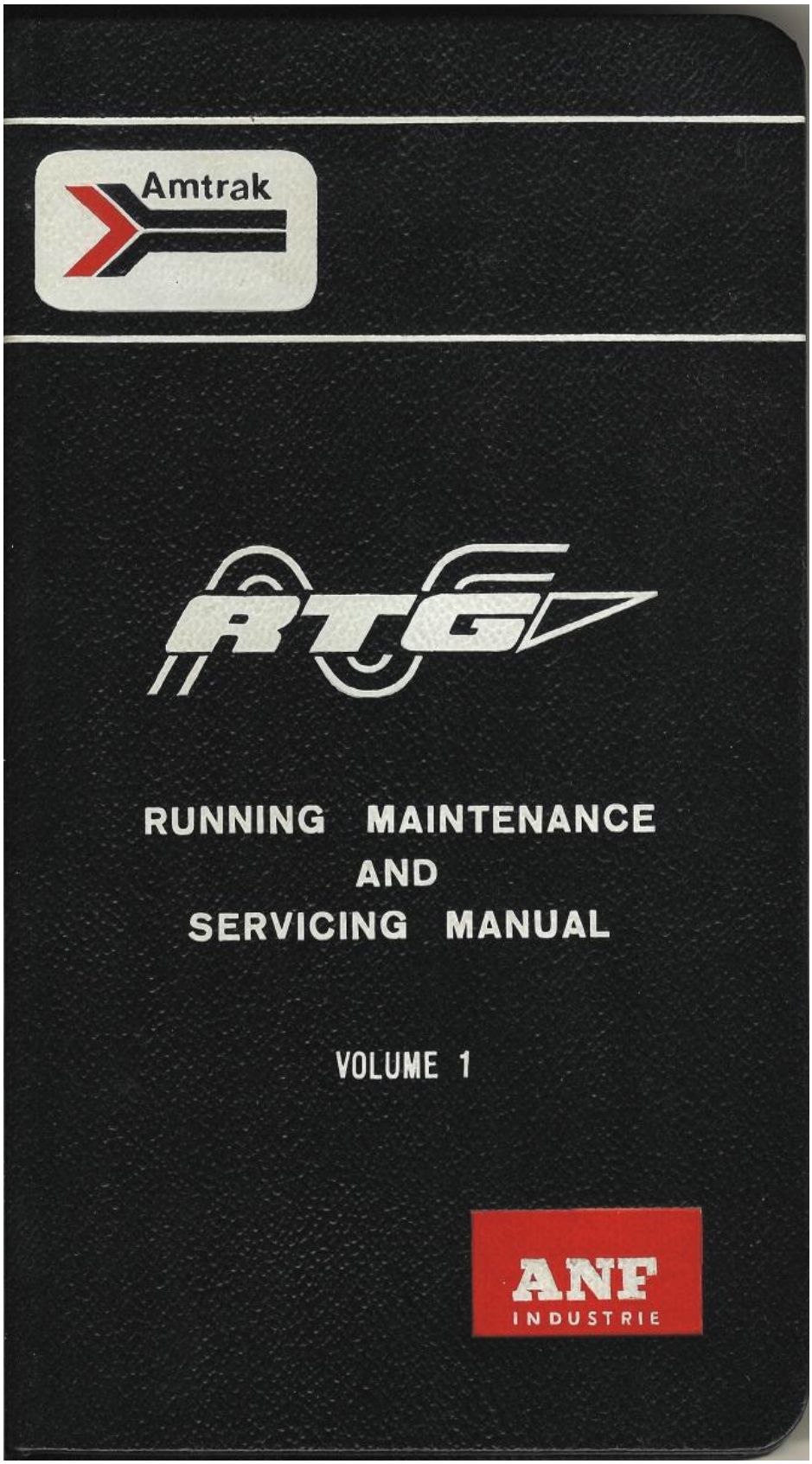
ASTAZOU IVA INSTRUCTION MANUAL

TABLE OF CONTENTS



ASTAZOU IVA PERSPECTIVE VIEW

Less detailed publications were also needed to inform and assist train crew members and other "in-the-field" personnel in basic Turboliner operation. Two examples of this type of reference tool are shown below.



The hard, textured cover, 16-ring bound *RTG Running Maintenance And Servicing Manuel, Volume 1,* shown above, was produced by RTG I Turboliner manufacturer ANF-Frangeco in Crespin, France. The 5x9-inch publication contains 55 pages, and covers all facets of basic train features and operation. The following four pages, from the above book, show the index, and the 44-step pre-run procedures.

ANF INDUSTRIE

INDEX

3.1. PRE-RUN PROCEDURES

3.1.1. SETTING UP TRAIN FOR OPERATION

The following sequence should be observed to prepare a train-set for operation.

IMPORTANT :

THE AUXILIARY TURBINES ARE NOT TO BE STARTED ANY TIME THAT SHORE POWER IS ATTACHED TO THE TRAIN, NOR IS SHORE POWER TO BE ATTACHED TO THE TRAIN AT ANY TIME WHEN AN AUXILIARY TURBINE IS RUNNING.

– START IN THE LEADING POWER CAR (steps 1-12)

1) Turn on main DC battery switch (HBA 2) in the baggage compartment next to the passageway door.
2) Rewind the tachometer and set the watch on time.
3) Check that the following eleven (11) engineer's control desk indicator lights are illuminated for :
   1. failure of # 1 main turbine (LS (G) TMO 1/),
   2. failure of # 1 auxiliary turbine (LS (G) TMOA 1/),

NOTE :

The indicator light comes on immediatly when battery switch HBA 2 is turned on, but the auxiliary turbine cannot be started until after 2 minutes.

   3. traction relay # 1 (LS Q (T) TMO 1/),
   4. temperature T4 TMO 1 (LS 700° 1/),
   5. temperature T4 TMO 2 (LS 700° 2/),
   6. hot box detector (LS (D.CB) /),
   7. battery charge 24 volts DC (LS BA 1/),
   8. battery charge 72 volts DC (LS BA 2/),
   9. presence of 380 volts AC (LS Q (M) 35/),
   10. wheel spin # 1 (LS PAT 1/),
   11. wheel spin # 2 (LS PAT 2/).

4) Check the main turbine engine test panel for tripped circuit breakers or fault indicator (C panel).
5) Check for correct operation of lights (LS DM/) and (LS (ALL) /) by means of test switch (Z (ES) LS/).
6) Check that the main turbine engine test switch (Z (ES) /) is in the NORMAL position.
7) Collect the two control keys if they are in this cab.
8) Check that the door between the air intake chamber and the turbine compartment is closed.
9) Check auxiliary engine test panel for tripped circuit breakers and fault indicators (panels E and E1).
10) Check that the auxiliary test switch (Z (ES) /) is in normal and the (ZVR/) switch is on (E panel).
11) Check for correct operation of lights (LS DM/) and (LS (AU) /) by means of test switch (Z (ES) LS/).
12) At night, push on the KEEPING LIGHT (trailer car) switch on auxiliary engineer's control desk (position 4).

– GO TO THE TRAILING POWER CAR (steps 13-31)

13) Turn on main DC battery switch (HBA) in baggage compartment.
14) Check auxiliary engine test panel for tripped circuit breakers and fault indicators (E and E1 panels).
15) Check that the auxiliary engine test switch Z (ES) / is in the NORMAL position and the Z VR/ is ON (E panel).
16) Check for correct operation of lights (LS DM/) and (LS (AU)/) by means of test switch (Z (ES) LS/).
17) Depress test button DVEN. Check that green light under cabinet is lit.

18) Check the main engine test panel for tripped circuit breakers and fault indicators (C panel).
19) Check for correct operation of lights (LS DM/) and (LS (AU) /) by means of test switch (Z (ES) LS/).
20) Depress button (BT ALN (SV) /) and check that (DJ (SV) / trips.
21) Reset (D3 (SV) /).
22) Check that the engine test switch is in the NORMAL position.
23) Check that the following fourteen (14) are illuminated for :
1. failure of # 1 main turbine (LS (G) TMO 1/),
2. failure of # 2 main turbine (LS (G) TMO 2/),
3. failure of # 1 auxiliary turbine (LS (G) TMOA 1/)
4. failure of # 2 auxiliary turbine (LS (G) TMOA 2/)

NOTE :
Although this light will be illuminated with the turning on of the main battery switch (HBA), the auxiliary unit cannot be started for two minutes as there is a time delay in the starting circuit.

5. traction relay # 1 (LS Q (T) TMO 1/),
6. traction relay # 2 (LS Q (T) TMO 2/),
7. T4 temperature traction engine # 1 (LS 700°/),
8. T4 temperature traction engine # 2 (LS 700°/),
9. hot box detector (LS (D.CB) /),
10. battery charge 24 volts DC (LS BA 1/),
11. battery charge 72 volts DC (LS BA 2/),
12. presence of 380 volts AC (LS Q (M) 35/),
13. wheel spin # 1 power car (LS PAT 1/),
14. wheel spin # 2 power car (LS PAT 2/),

24) Check that the door between the air intake chamber and the turbine compartment is closed.
25) Insert two control keys in desk :
1. turn brake key to "ELE-PNEU LEAD",
2. turn desk key to ON.

26) Start auxiliary turbine (see procedure following 3.1.2). Auxiliary turbine will not start for 2 minutes after turning on master battery (HBA) switch. Use power car auxiliary turbine on each trip to help equalize running hours (start 1).
27) Switch compressor on to AUTO(matic) position.
28) Start main turbine (see procedure following 3.1.3 (start 2).
29) Turn off compressor.
30) Lock desk and remove desk key.
31) Remove brake key both engines will remain running after placing it on "OUT".

– RETURN TO LEADING POWER CAR (steps 32-40)

32) Insert desk key and unlock control desk.
33) Insert brake key and turn to "ELE-PNEU LEAD" position.
34) Turn compressor switch to AUTO(matic) position.
35) Turn on trailer car lights at engineer's control desk.
36) Start main turbine (see procedure following).
37) Turn on headlight (PROJECTOR) and marker lights (RED LIGHT) as necessary.
38) Set reversing lever (MPJ/) at F(orward).
NOTE :
Check that light (L (J) /) comes on and extinguishes. If light remains lit, place lever on R(everse) then move it back to F(orward).
39) Test brake systems.
NOTE :
For all brake system tests stop the train by means of the parking brake.

1. make leak check of main reservoir (minimum 118 psi) and brake pipe system (see Chapter 3.1.5.2.),
2. hydrodynamic brake (see Chapter 3.1.5.4.),

3. emergency valve (see Chapter 3.1.5.5.),
4. deadman's control (see Chapter 3.1.5.3.).

40) Reset traction relays (Q (T) 1/2). Release train brakes, either by electro-pneumatic control switch or by service brake lever.

– GO TO EACH OF THE THREE TRAILER CARS (steps 41-44)

41) Check that the vestibule 4-position air conditioning switches are in AUTO(matic) position.
42) Check that emergency lighting switch is in LIGHTING position.
43) Check that the red master air conditioning failure lights (3) (on public address cabinet in baggage compartment) is not lit.
44) Check that the battery load light LSBA is not illuminated.

3.1.2. STARTING OF AUXILIARY TURBINE ENGINE

3.1.2.1. GENERAL

While the train is running, only a single auxiliary turbine should be started up. In order to equalize the usage of the auxiliary turbine in each power car, the auxiliary turbine of the trailing power car to be used on the outbound revenue trip should be started up.

The auxiliary turbines can be started from the engineer's control desk in use, or the test panel for the particular auxiliary turbine engine.

3.1.2.2. PROCEDURES

– START-UP FROM THE CONTROL CAB IN USE

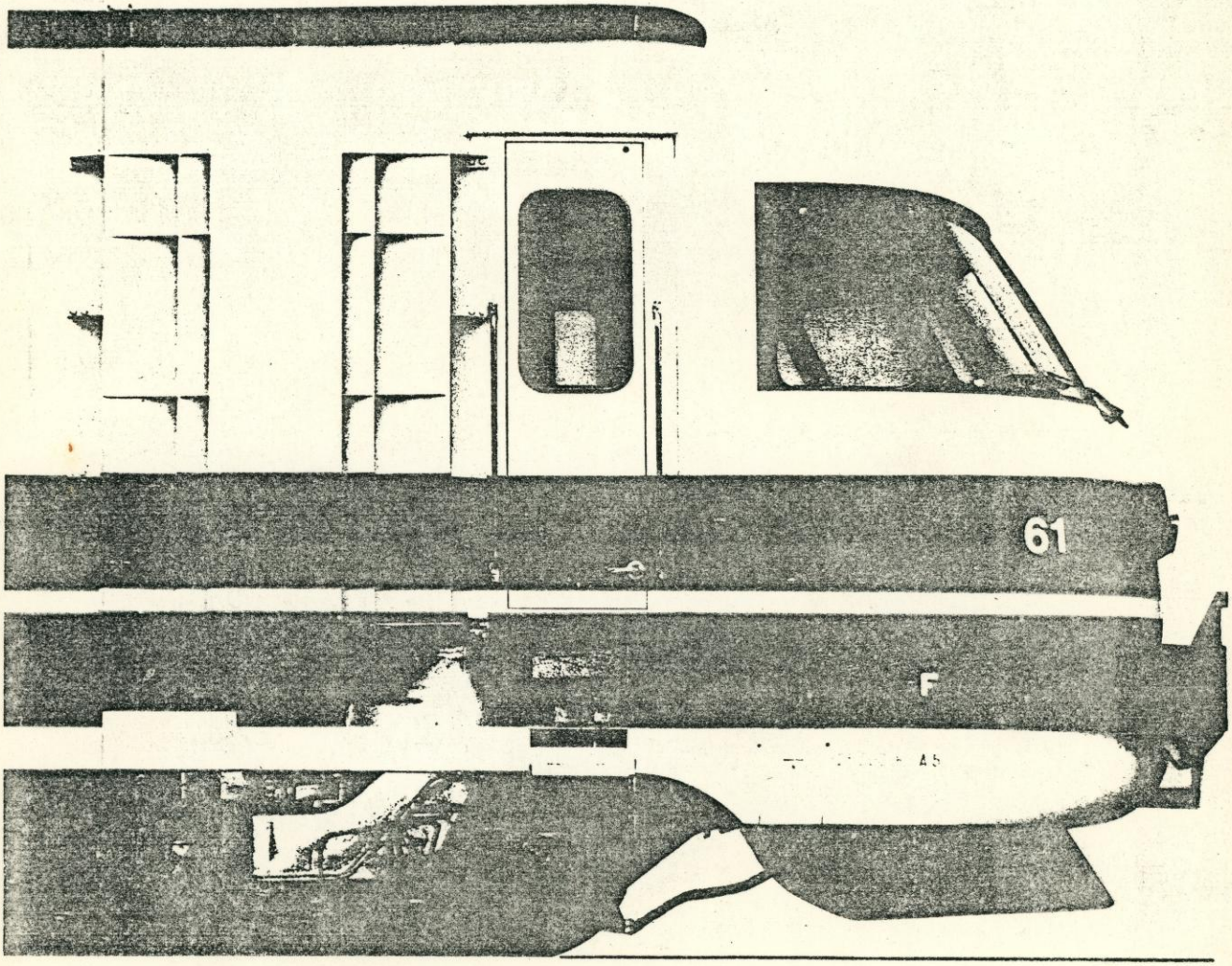
1) Unlock the engineer's control desk.
2) If necessary, wait for illumination of the auxiliary turbine failure indicator light (LS (G) TMO A/) for the turbine that is to be started up.
3) Press on the corresponding START push-button (BP (L) TMO A1/) or (BP (L) TMO A2/) firmly for one or two seconds.
4) Watch for extinguishing of the following indicator lights :
   – (LS (G) TMO A1/) (auxiliary turbine No. 1 FAILURE),
   – (LS (G) TMO A2/) (auxiliary turbine No. 2 FAILURE).
5) Within two (2) minutes, the following indicator lights should go OUT :
   – (LS (Q) M 35/) (presence of 380 VOLTS), and
   – (LS BA 2/) (72-volt battery CHARGE).

– START-UP FROM TEST PANEL (E panel)

This is located in power car baggage compartment.
1) Unlock the engineer's control desk on power car whose auxiliary turbine engine is to be used.
2) Set the auxiliary turbine testing switch (Z (ES) TMO A/) in the TEST position.
3) Check that LS (GES) TMOA comes on.
4) If necessary, wait on two minutes and press on the start-up test push-button (BP (ES-L) TMO A/) firmly for one or two seconds.
5) Wait for extinguishing of the indicator light (LS (G.ES) TMO A/) (AUXILIARY TURBINE FAILURE).
6) Allow time for start-up fueling to take place (about 20 seconds), then observe the proper sequence of start-up operations, in the following order :
   1. illumination of indicator light (LS (DM) TMO A/) (indicating triggering of the turbine by the starter),

Amtrak

GENERAL DESCRIPTION OF THE R T G TURBO TRAIN



OFFICE OF THE CHIEF MECHANICAL OFFICER
955 L'ENFANT PLAZA NORTH, S.W.
WASHINGTON, D.C. 20024

Also providing an early overview of the first two RTG I Turboliner trainsets was this 45-page publication from Amtrak's Office of the Chief Mechanical Officer. Produced in October, 1973, the *General Description Of The RTG Turbo Train* was timed to coincide with the inauguration of the first Turboliner route between Chicago and St. Louis. Shown below, are five selected pages from the 8-1/2x11 inch-sized volume.

GENERAL DESCRIPTION OF

THE R.T.G. TURBOTRAIN

TABLE OF CONTENTS

GENERAL DESCRIPTION OF
THE R T G TURBO TRAIN
TABLE OF CONTENTS (CONT.)

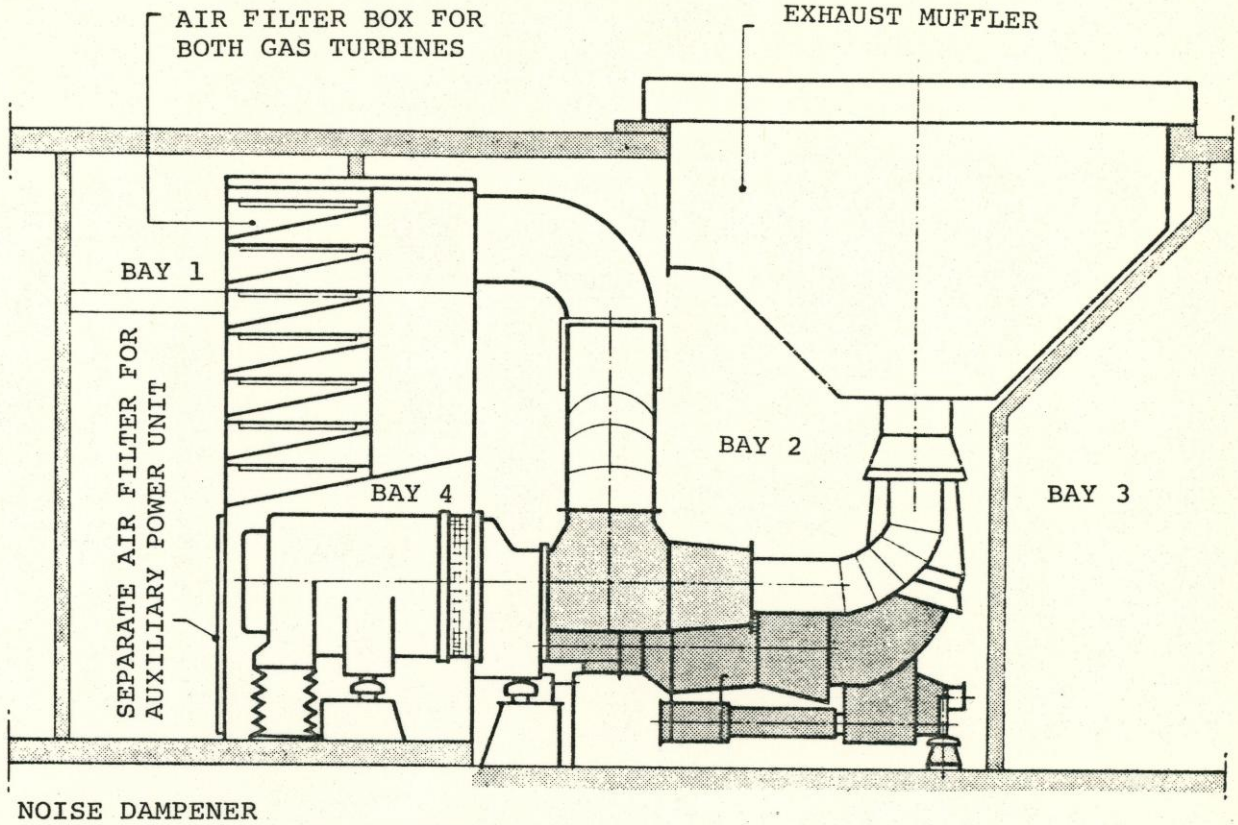
R.T.G. AT A GLANCE

		TRAINSET OF FIVE CARS
COMPOSITION		
POWER CAR		2
COACH CAR		2
COACH-GRILL CAR		1
OVERALL LENGTH (EXCLUDING COUPLERS)		423 ft.
HEIGHT (TOP OF RAIL TO ROOF LINE)		12'4"
OVERALL HEIGHT (INCLUDING EXHAUST SHROUDING)		13'0"
TOTAL WEIGHT (EMPTY, BUT READY TO OPERATE)		248 tons
NUMBER OF SEATS	TOTAL	296 (+24 at tables)
POWER CARS (2)		48 (x2)
COACH CARS (2)		76, 80
COACH-GRILL CAR (1)		44 (+24 at tables)
NUMBER OF LAVATORIES AND WATER COOLERS-TOTAL		7
POWER CARS (2) AND COACH-GRILL CAR (1)		1 each
COACH CARS (2)		2 each
NUMBER OF BAGGAGE COMPARTMENTS		
POWER CARS (2)		1 9'x9' space/car
COACH CARS (2)		None
COACH-GRILL CAR (1)		None
NUMBER OF EMERGENCY EXIT WINDOWS	TOTAL	10
ALL CARS		2 each
NUMBER OF FIRE EXTINGUISHERS	TOTAL	20
POWER CARS (EACH)		6 powder, 2 water
COACH CARS (2)		None
COACH-GRILL CAR (1)		1 powder, 1 water

POWER CARS	Each Car	Total
POWER OUTPUT - TRACTION TURBINE	1140 HP	2280 HP
POWER OUTPUT - AUXILIARY TURBINE (ONLY ONE OPERATING)	250 kW	250 kW
FUEL CAPACITY ("GO" PROPULSION FUEL)	1,080 gal	2,160 gal
("PSP" STARTING FUEL)	32.5 gal	65 gal
FUEL CONSUMPTION ("GO")	400 gal/kWg (150 gal/hr)	
MAXIMUM OPERATING SPEED (LEVEL TRACK)	125 mph (200 km)	
MAXIMUM OPERATING RANGE	14.5 hrs	
MAXIMUM T-4 (TEMP) - TRACTION TURBINE	1292° F	
MAXIMUM T-4 (TEMP) - AUXILIARY TURBINE	990° F	
MINIMUM OIL PRESSURE (BOTH ENGINES)	8 lb	
SUSPENSION		
4-WHEEL POWER TRUCKS (POWER CARS)	1	1
4-WHEEL TRAILER TRUCKS (POWER CARS)	1	2
4-WHEEL TRAILER TRUCKS	2	6
WHEEL DIAMETER	33.9 in. (0.86 m)	
MINIMUM NEGOTIABLE CURVE	300 ft. radius	

TURBINE COMPARTMENT LAYOUT

SIDE VIEW



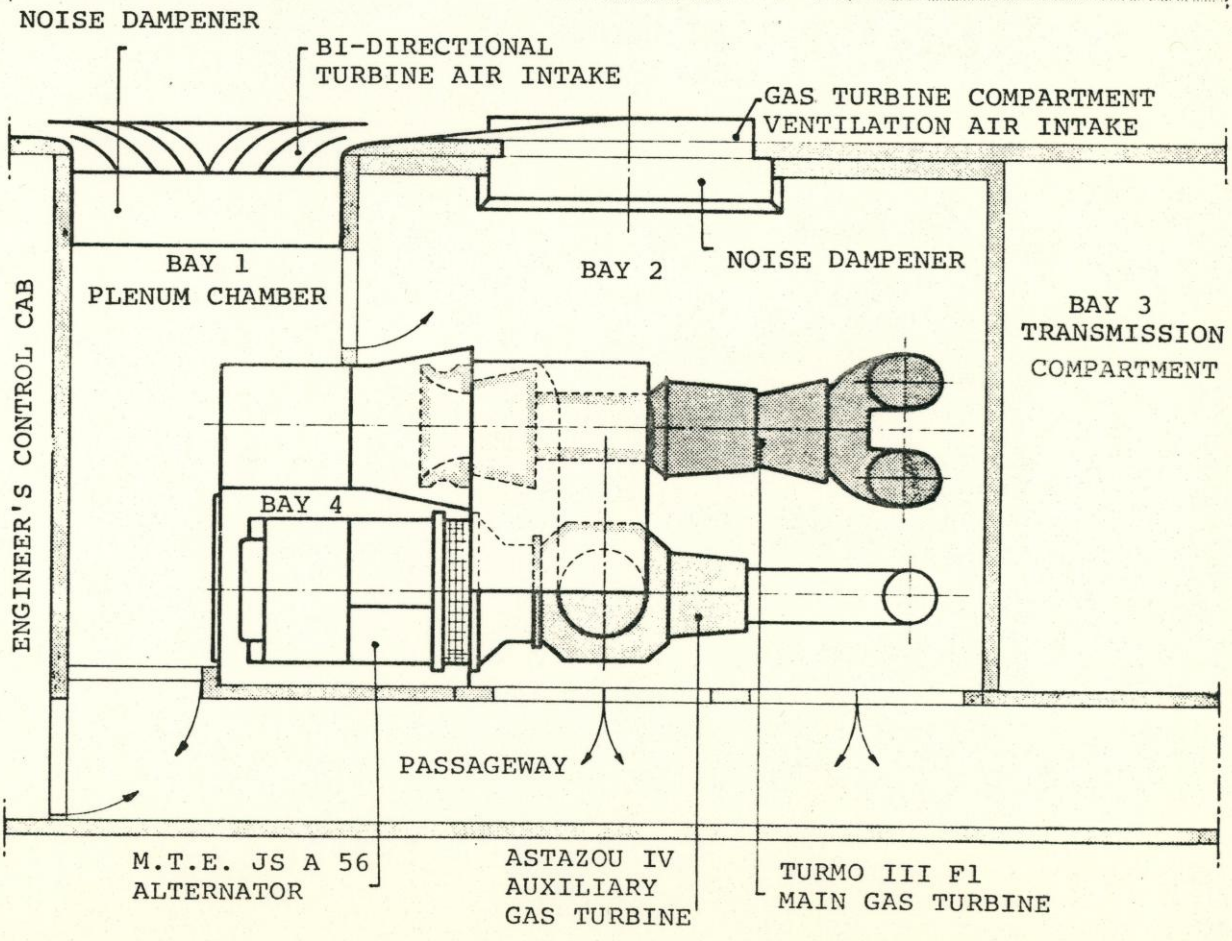
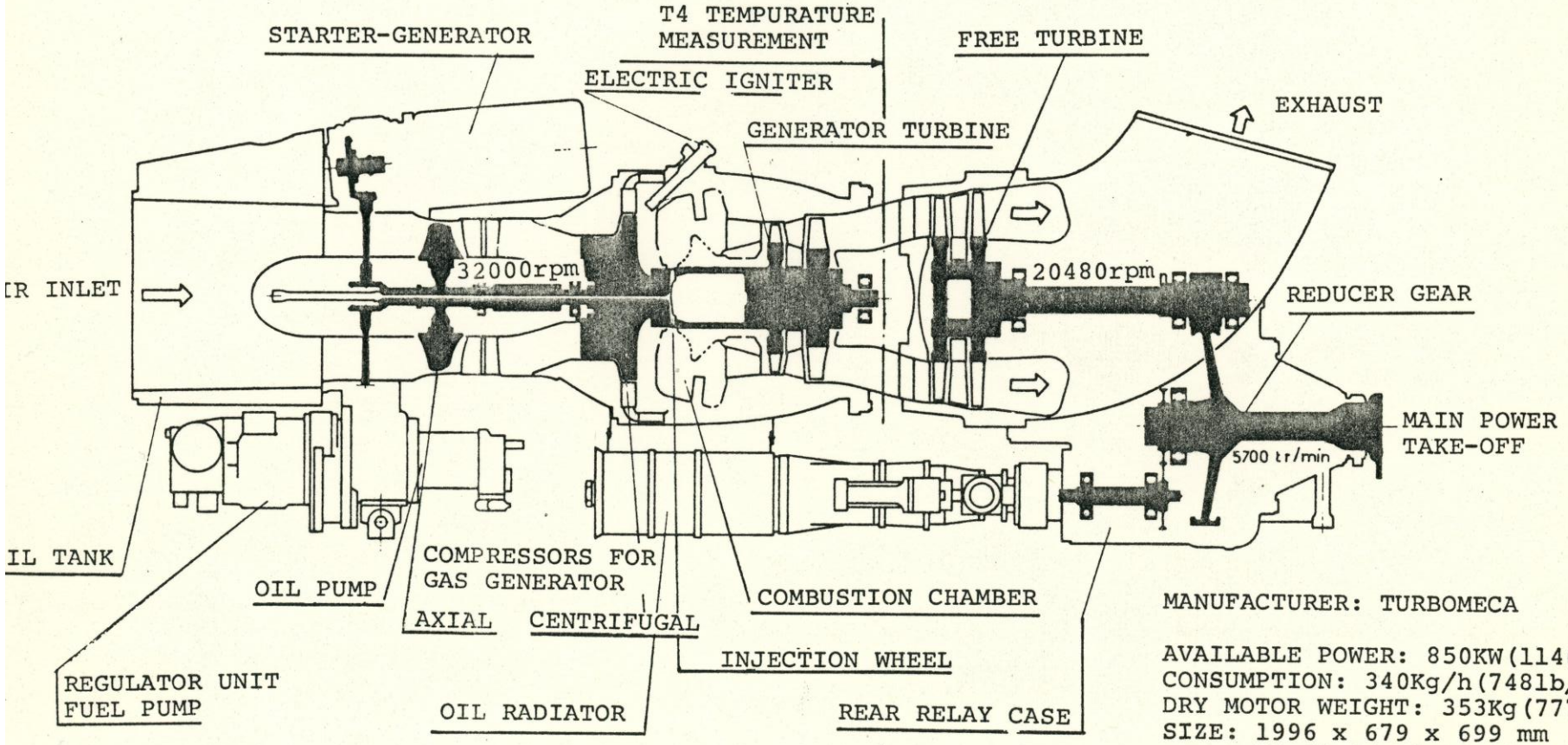


FIGURE 6

TURMO III F1 TURBINE-SHAFT ENGINE

LONGITUDINAL CROSS-SECTION



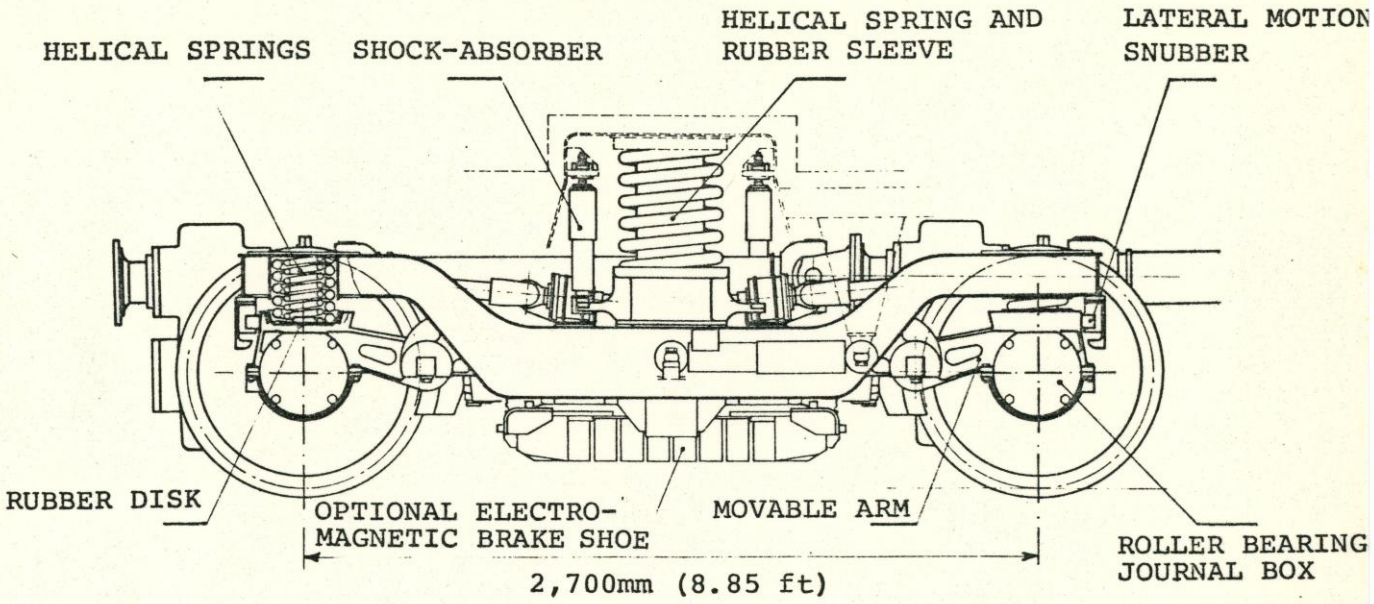
MANUFACTURER: TURBOMECA

AVAILABLE POWER: 850KW(1140hp)
CONSUMPTION: 340Kg/h(748lb/h)
DRY MOTOR WEIGHT: 353Kg(777lb)
SIZE: 1996 x 679 x 699 mm
78.6"x26.7"x27.5"

FIGURE 7

RTG PC12

RTG POWER TRUCK (TYPE Y223)



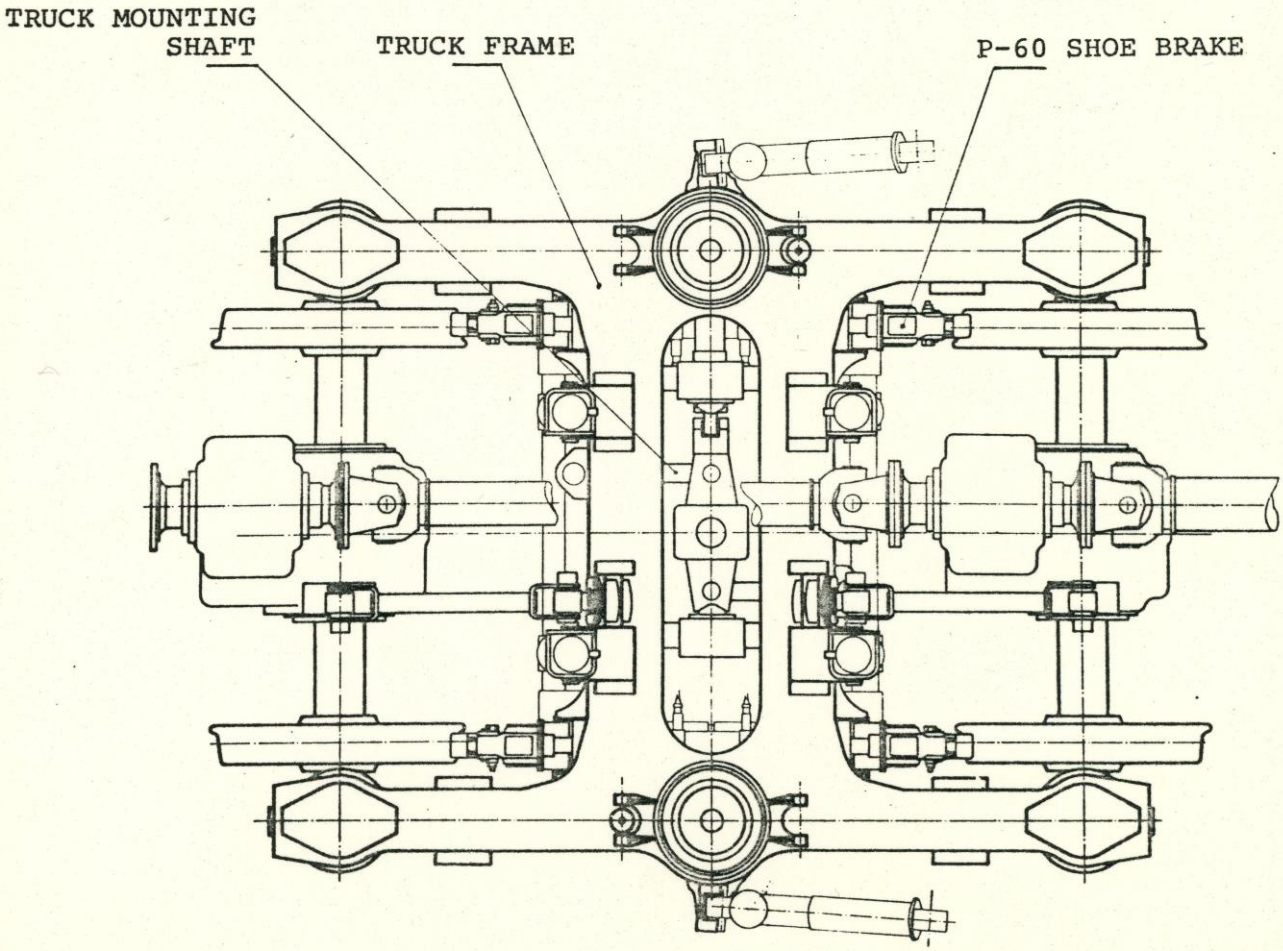
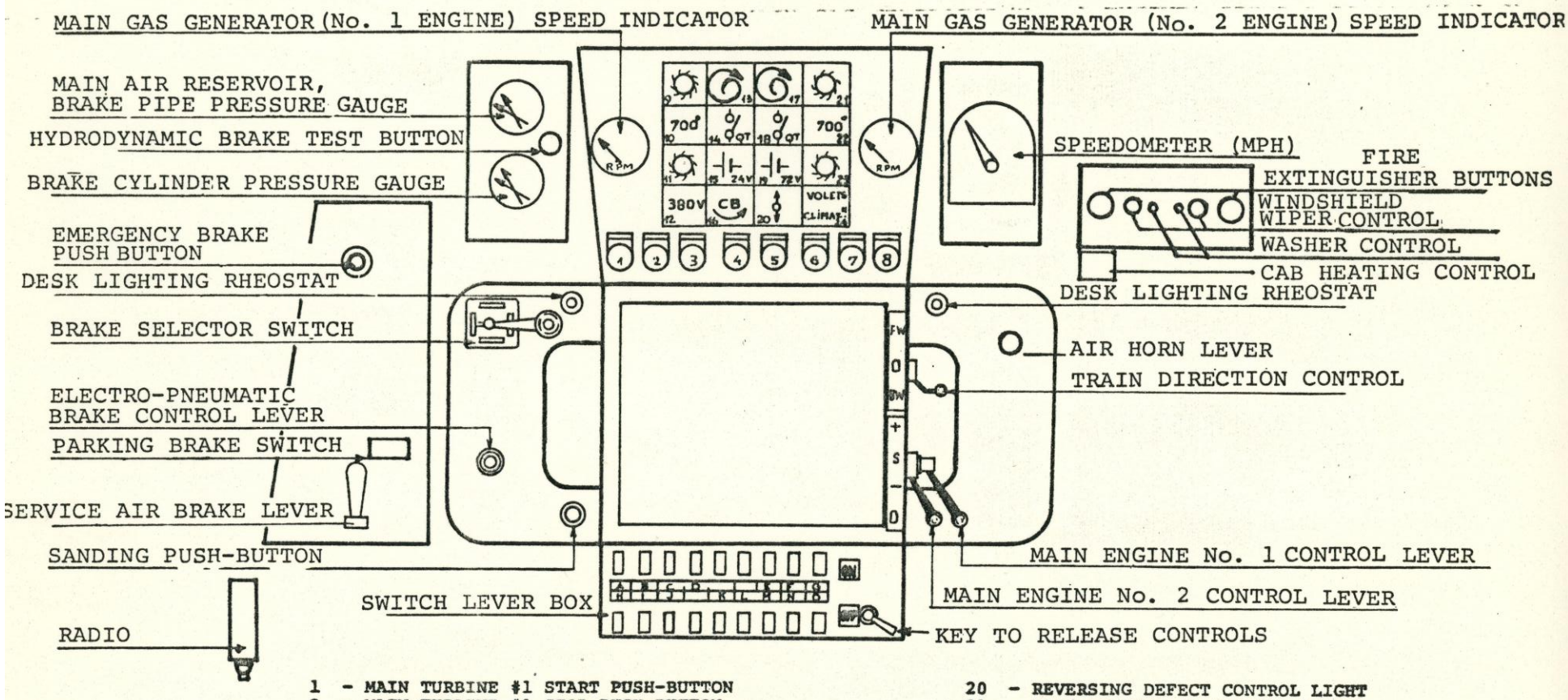


FIGURE 12

RTGPC21

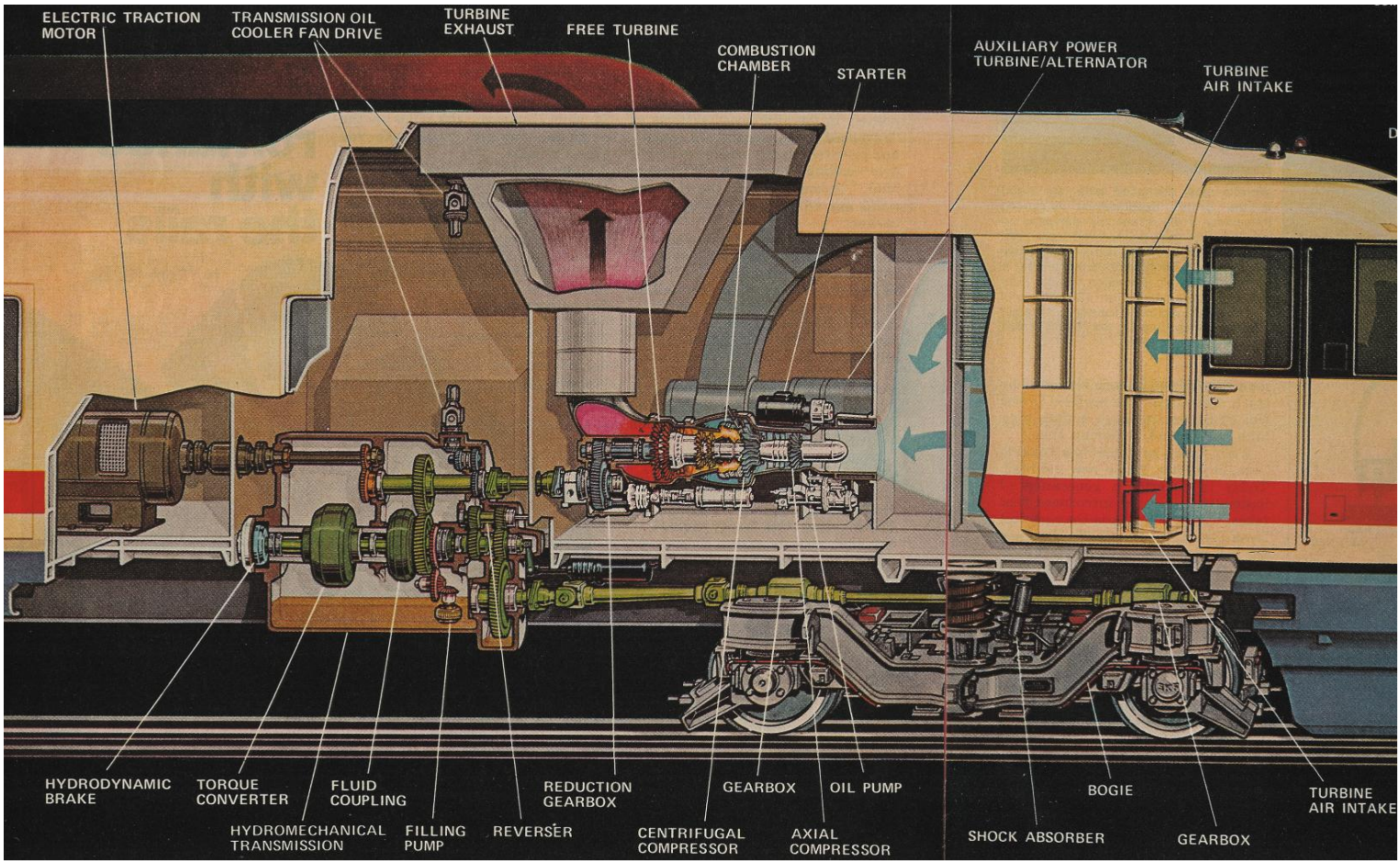
ENGINEER'S CONTROL DESK



1 - MAIN TURBINE #1 START PUSH-BUTTON
2 - MAIN TURBINE #1 STOP PUSH-BUTTON
3 - AUXILIARY TURBINE #1 START PUSH-BUTTON
4 - AUXILIARY TURBINES #1 AND 2 STOP PUSH-BUTTON
5 - MAIN TURBINES #1 AND 2 EMERGENCY STOP PUSH-BOTTON
6 - AUXILIARY TURBINE #2 START PUSH-BUTTON
7 - MAIN TURBINE #2 START PUSH-BUTTON
8 - MAIN TURBINE #2 STOP BUSH-BUTTON
9 - MAIN TURBINE #1 CONTROL LIGHT
10 - T4·700°C CONTROL LIGHT, MAIN TURBINE #1
11 - AUXILIARY TURBINE #1 CONTROL LIGHT
12 - 380-VOLT 3-PHASE CURRENT CONTROL LIGHT
13 - MAIN TURBINE #1 WHEEL-SLIP CONTROL LIGHT
14 - MAIN TURBINE #1 TRACTION RELAY CONTROL LIGHT
15 - 24-VOLT ACCUMULATOR LOAD CONTROL LIGHT
16 - JOURNAL-BOX OVERHEATING CONTROL LIGHT
17 - MAIN TURBINE #2 SLIPPING CONTROL LIGHT
18 - MAIN TURBINE #2 TRACTION RELAY CONTROL LIGHT
19 - 72-VOLT ACCUMULATOR LOAD CONTROL LIGHT
20 - REVERSING DEFECT CONTROL LIGHT
21 - MAIN TURBINE #2 CONTROL LIGHT
22 - T4·700°C CONTROL LIGHT, MAIN TURBINE #2
23 - AUXILIARY TURBINE #2 CONTROL LIGHT
24 - VENTILATING SHUTTERS CONTROL LIGHT
A - TRACTION RELAY #1 RESET PUSH-BUTTON
B - TRACTION RELAY #2 RESET PUSH-BUTTON
C - COMPRESSOR "AUTOMATIC" SWITCH
D - COMPRESSOR "MANUAL" SWITCH
E - WINDOW ANTI-FOGGING SWITCH
F - VENTILATING SHUTTERS SWITCH
G - LIGHTING SWITCH
H - CAB LIGHT SWITCH
I - ORDER READING LIGHT SWITCH
J - DESK LIGHT SWITCH
K - CENTRAL LIGHT SWITCH
L-M - HEADLIGHT PUSH-BUTTON
N - DEADMAN'S SYSTEM TEST SWITCH
O - LIGHT-MAINTAINING SWITCH

RTG PC 04

FIGURE 14

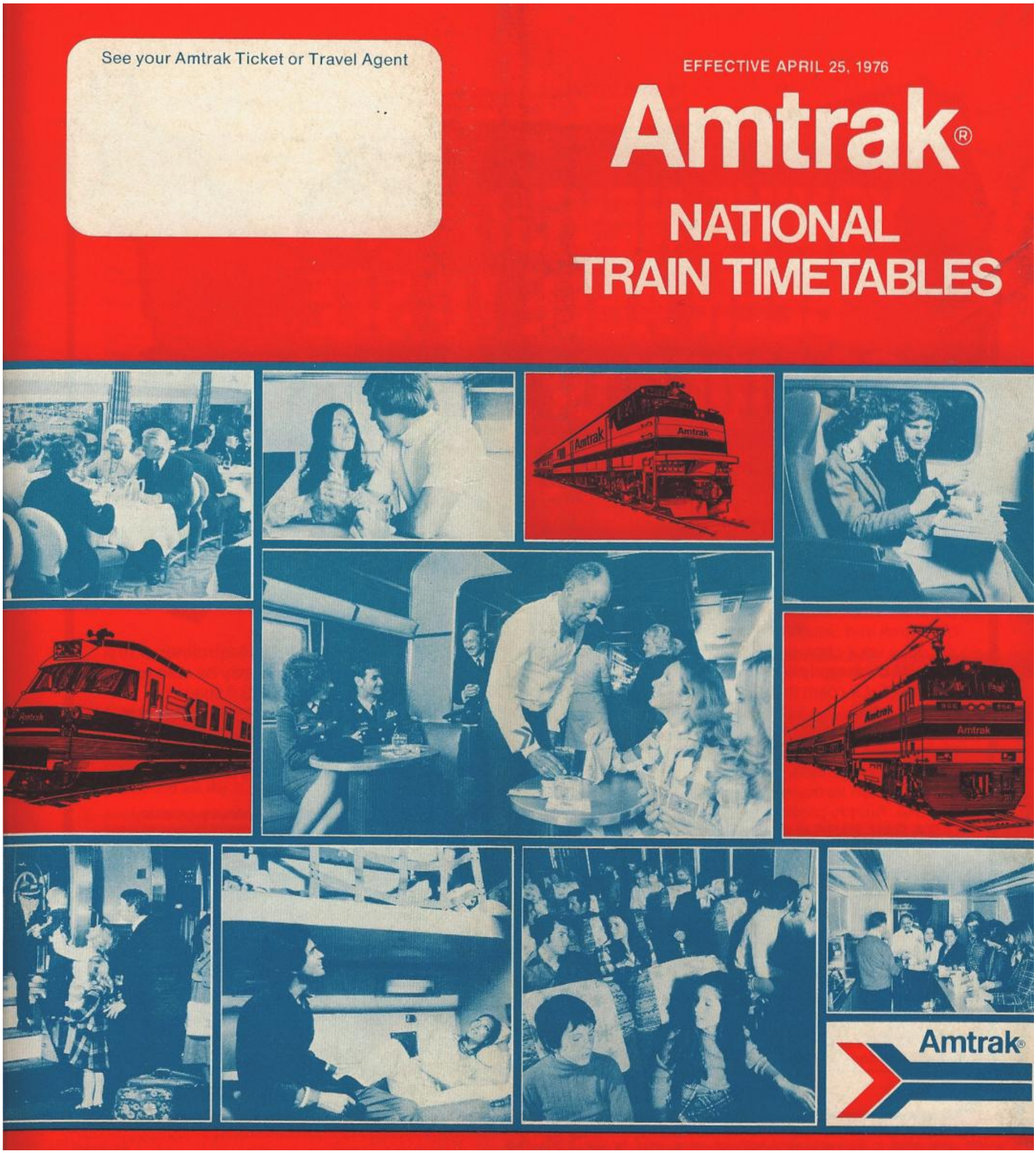


The above cutaway drawing, produced by Rohr Industries, shows the overall mechanical design of an RTL I power car. Except for the New York City-mandated electric traction motor (which used third-rail-derived power), located in what otherwise would have been a baggage area, the power components were essentially unchanged from the highly-reliable RTG Turboliners. Note that a transmission and cardan drive shaft were used to transfer power from the turbine engine to the drive truck.

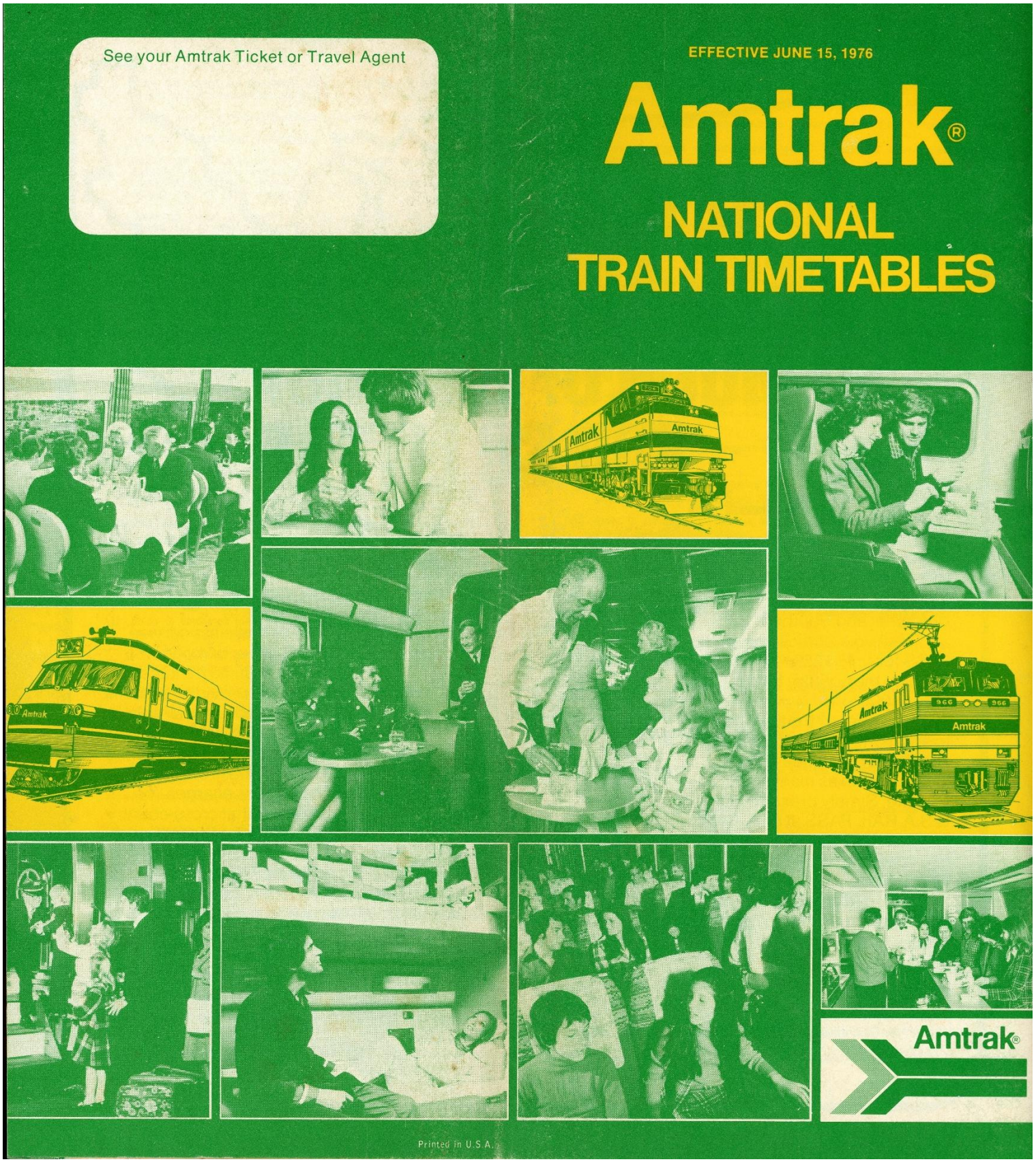
Turboliner Visually Portraying Timetables/Brochures

National Timetables/Brochures

A Turboliner was visually portrayed on the cover of five national or system-wide timetables. First to be issued was the *Agent's Edition* of the October 28, 1973 schedule, shown to the right; which took effect just under four weeks after the inauguration of Amtrak's first Turboliner service, on the Chicago-St. Louis route. The cover photo includes one of the two RTG I, Group 1 trainsets used to launch that service.



Second in print was the April 25, 1976 schedule shown above. The cover collage of this publication included the power car of an RTG I, Group 2 trainset; the type of equipment used one year earlier to initiate the highly-successful Chicago-Detroit Turboliner service.



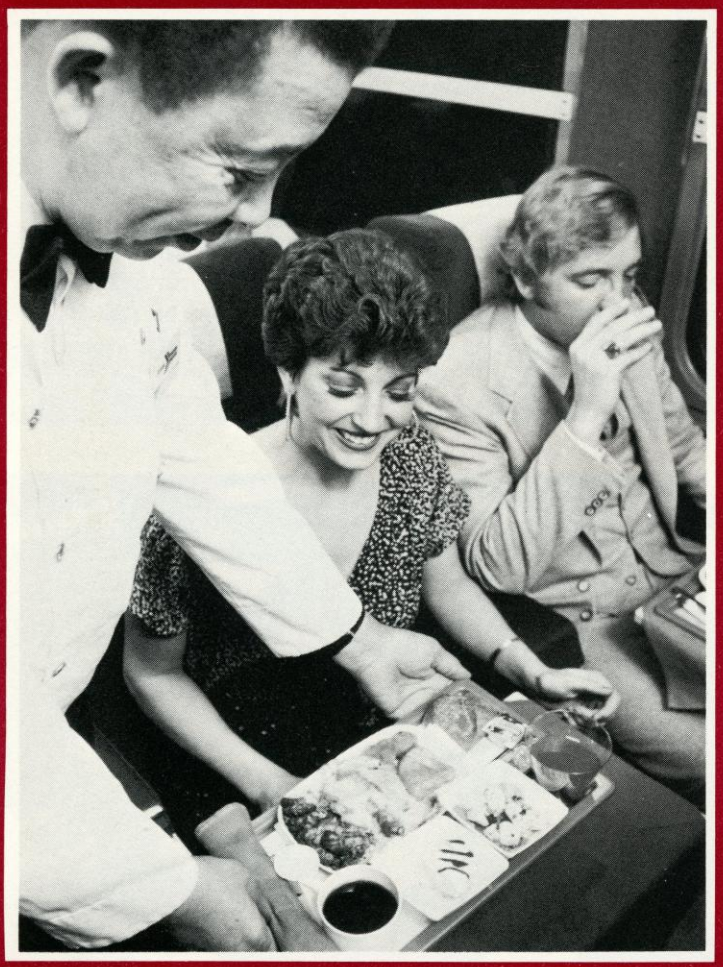
Third, was the June 15, 1976 edition, the cover of which was identical to the April 25, 1976 version, except for the use of yellow and green ink instead of the previous red and blue ink colors.

The fourth national timetable cover to visually include a Turboliner was issued on April 24, 1983, and showed a photograph of RTL I power car 155; a picture that was also used in a number of Amtrak brochure, newspaper, and magazine advertisements, as well as a poster. Just a few days before the 20th anniversary of the effective date of this timetable, power car 155 began revenue service on the Empire Corridor as part of the prototype trainset for the ill-fated RTL III project.

The fifth, and final, Amtrak national timetable with a Turboliner-depicting cover was undoubtedly the most eye-catching. The colorful painting of an RTL I Turboliner passing under the George Washington Bridge, while departing New York City on the new West Side Connecting line, both portrayed and commemorated the consolidation of all Amtrak service in New York City at Penn Station; which took place on the document's April 7, 1991 date of issue. On that date, the first Empire Corridor revenue service trip into Pennsylvania Station was made by an RTL I Turboliner trainset led by Power Car 155 (see page 89 of the second Turboliner book).

Next time you travel, try something different.

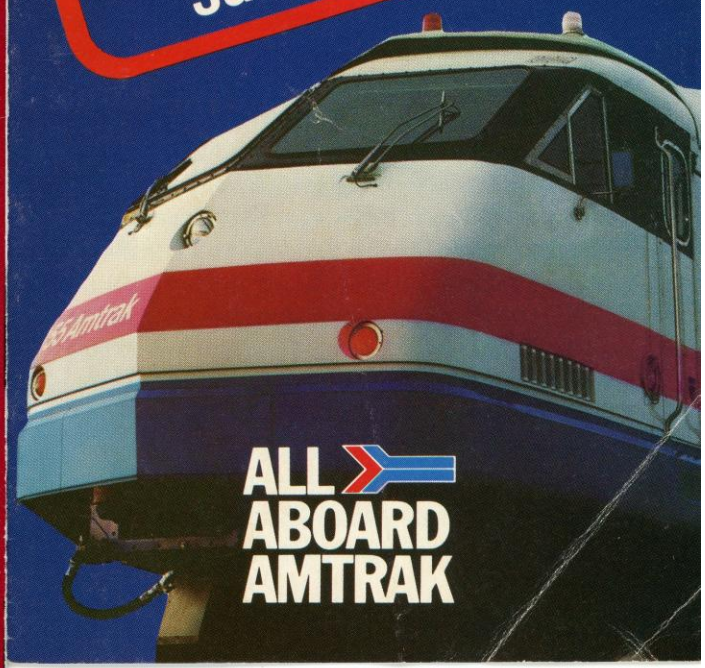
Eat when you're hungry.



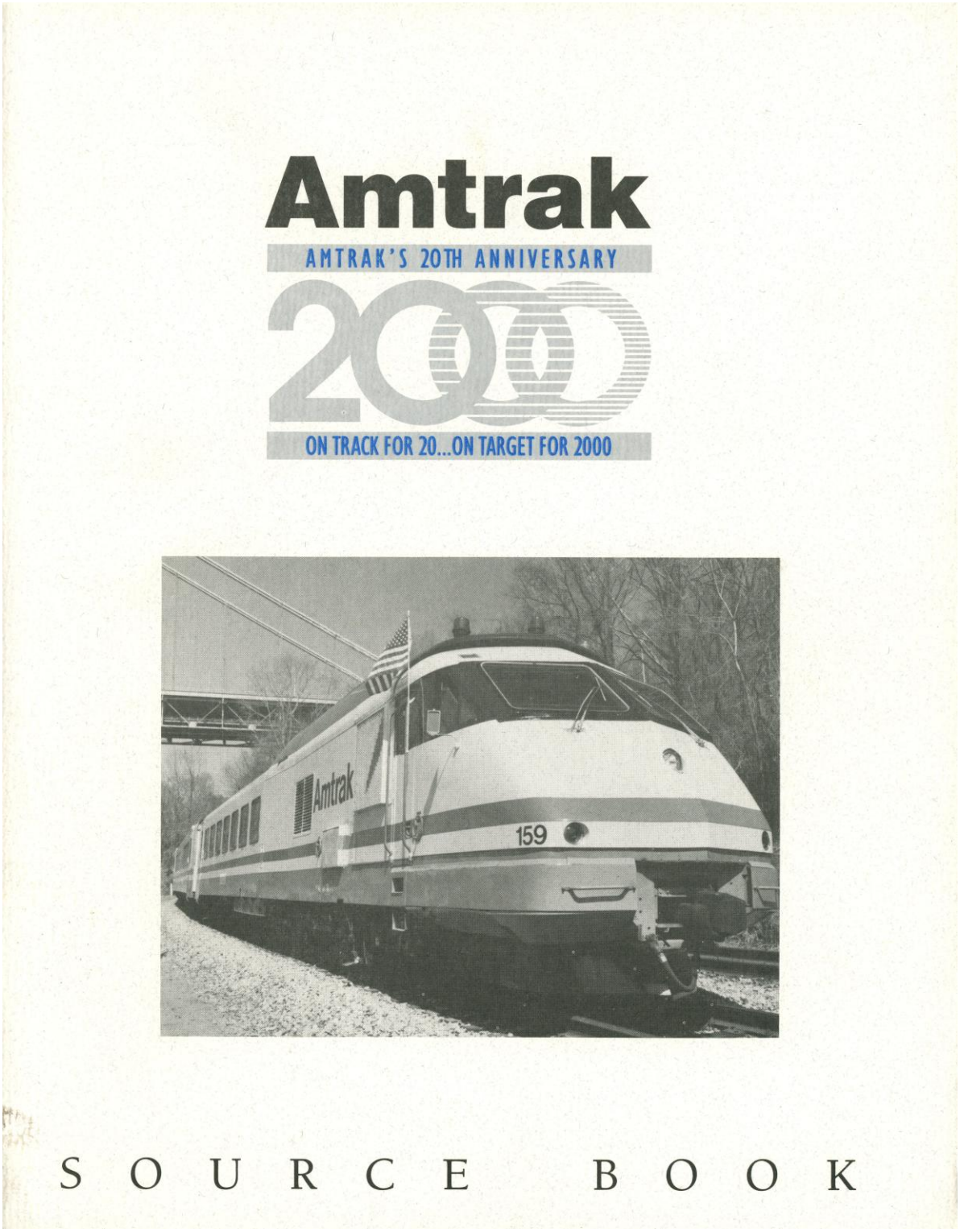
Amtrak®

Amtrak's All Aboard America Fares

SPRING VALUES
For Travel Through
June 30, 1984



Examples of two nationally-related and nationally-distributed brochures featuring a Turboliner on the cover are shown above. The brochure on the left, issued in January 1977, which overviewed all manner of Amtrak food service, pictured first-class Turboclub passengers being served a meal at their seats. The "All Aboard America" fare promotion brochure on the right, issued in 1984, featured an image of RTL I Turboliner Power Car 155.



Very likely the last nationally-distributed Amtrak publication to feature a Turboliner on the cover was the 1991-issued *Amtrak Source Book.* Produced by Amtrak Public Affairs, this 40-page booklet was designed as ". . . a special resource tool for students, teachers, writers, lecturers, news reporters, business associates, and anyone else who needs background on what Amtrak is, how it was formed, how it operates, what it has accomplished, and what it expects to accomplish in the future."

The photo on the cover was taken on April 4, 1991, and shows the inaugural train to operate over the recently completed connection between the Empire Corridor and Pennsylvania Station in New York City. Aboard was Amtrak President W. Graham Claytor Jr., and other officials, who had just completed an inaugural ceremony at the Albany-Rensselaer, New York station. In the photo, the train is passing under the George Washington Bridge in New York City. Lead RTL I Power Car 159 displayed the flags of both the United States and New York State. Revenue service over the new routing began several days later, on April 7

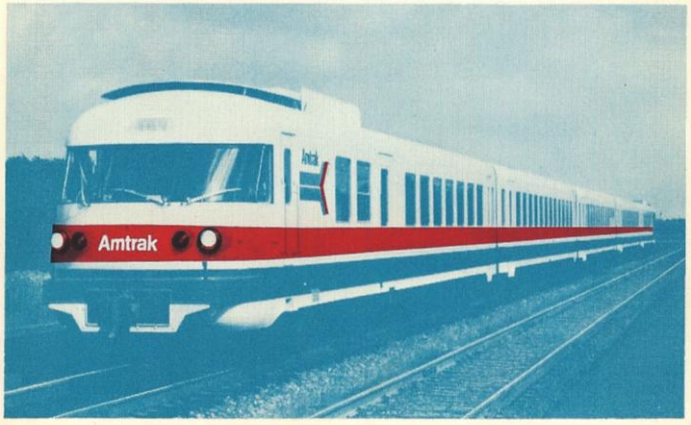
Midwest Regional and Route-Specific Timetables/Brochures

(Shown in order of publication date)

EFFECTIVE OCTOBER 1, 1973

Amtrak®

NEW! Turbo Service



CHICAGO - SPRINGFIELD - ST. LOUIS

(Including conventional trains and Chicago - Milwaukee connections)

SAMPLE FARES

	One-way
Chicago—St. Louis	$14.50
Chicago—Springfield	$ 9.25

INFORMATION

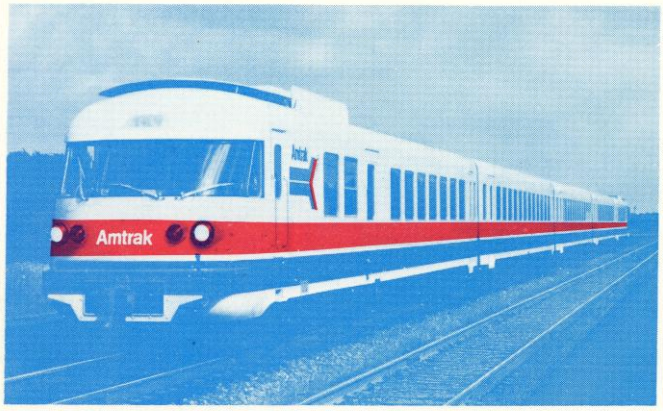
Ⓣ Alton (618) 465-3751	Lincoln (800) 972-9147
Ⓣ Bloomington (309) 828-5670	Milwaukee (414) 271-6150
Carlinville (217) 854-4366	Pontiac (815) 844-6996
Ⓣ Chicago (312) 786-1333	Ⓣ St. Louis (314) 436-2500
Glenview (312) 724-3110	Ⓣ Springfield (217) 554-9838
Ⓣ Joliet (815) 727-9279	Sturtevant (Racine) (414) 886-4440

Ⓣ — This city served by both Turbo and conventional trains.

EFFECTIVE JANUARY 13, 1974

Amtrak®

NEW! Turbo Service



CHICAGO - SPRINGFIELD - ST. LOUIS

(Including conventional trains and Chicago - Milwaukee connections)

SAMPLE FARES

	One-way
Chicago—St. Louis	$14.50
Chicago—Springfield	$ 9.25

INFORMATION

Ⓣ Alton (618) 465-3751	Lincoln (800) 972-9147
Ⓣ Bloomington (309) 828-5670	Milwaukee (414) 271-6150
Carlinville (800) 972-9147	Pontiac (815) 844-6996
Ⓣ Chicago (312) 786-1333	Ⓣ St. Louis (314) 436-2500
Glenview (312) 724-3110	Ⓣ Springfield (217) 554-9838
Ⓣ Joliet (815) 727-9279	Sturtevant (Racine) (414) 886-4440

Ⓣ — This city served by both Turbo and conventional trains.

EFFECTIVE MAY 19, 1974

MIDWEST SCHEDULES

Amtrak®

Amtrak...Takes You Clear Across America

DISCOVER AMERICA

expo'74

MEMBER AMERICAN SOCIETY OF TRAVEL AGENTS ASTA

EFFECTIVE SEPTEMBER 15, 1974

MIDWEST SCHEDULES

Amtrak®

NEW!
CHICAGO—PORT HURON SERVICE

Amtrak...Takes You Clear Across America

DISCOVER AMERICA

MEMBER AMERICAN SOCIETY OF TRAVEL AGENTS ASTA

EFFECTIVE FEBRUARY 23, 1975

MIDWEST SCHEDULES

Amtrak®

NOW!
ADDITIONAL MICHIGAN SERVICE

Amtrak...Takes You Clear Across America

DISCOVER AMERICA

AMERICAN REVOLUTION BICENTENNIAL 1776-1976

MEMBER AMERICAN SOCIETY OF TRAVEL AGENTS ASTA

EFFECTIVE APRIL 27, 1975

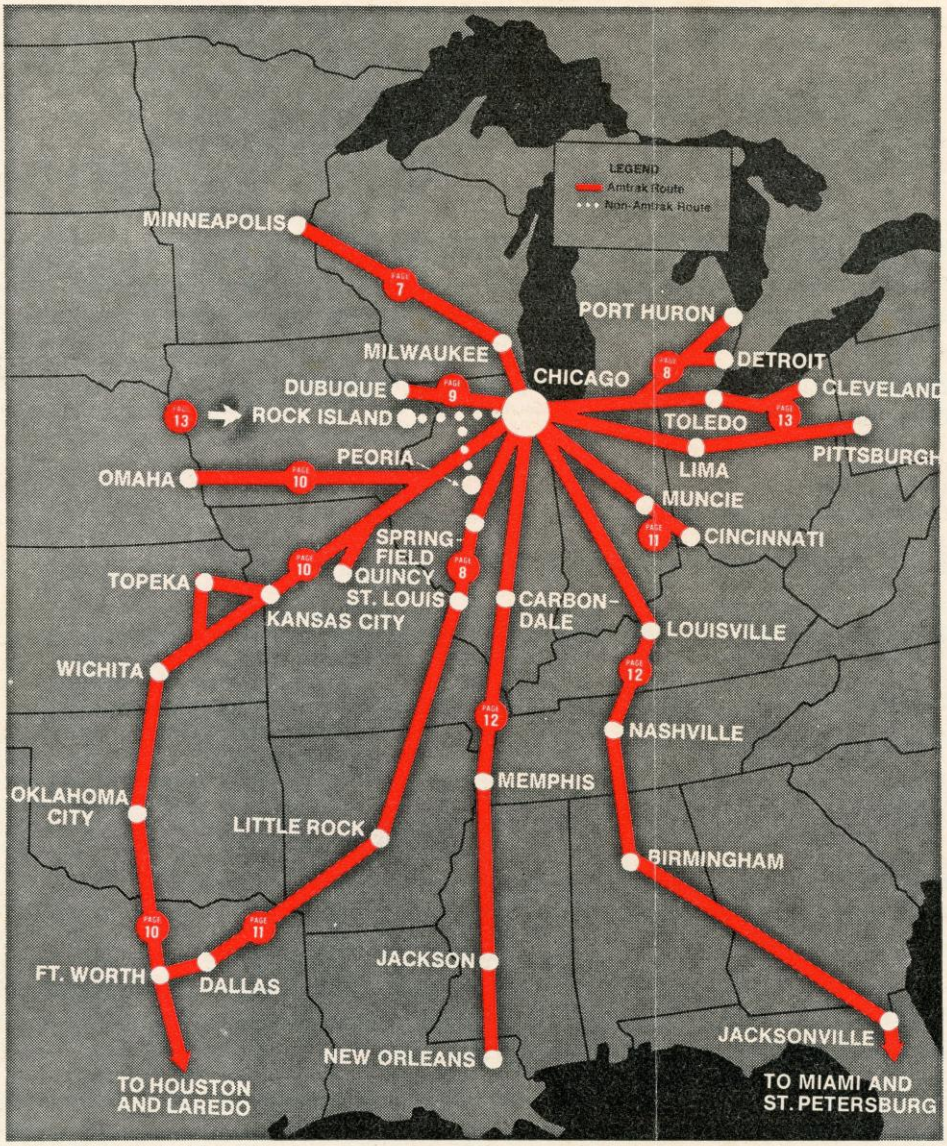
Amtrak®

Introduces

TOMORROW'S TRAIN TODAY

NEW

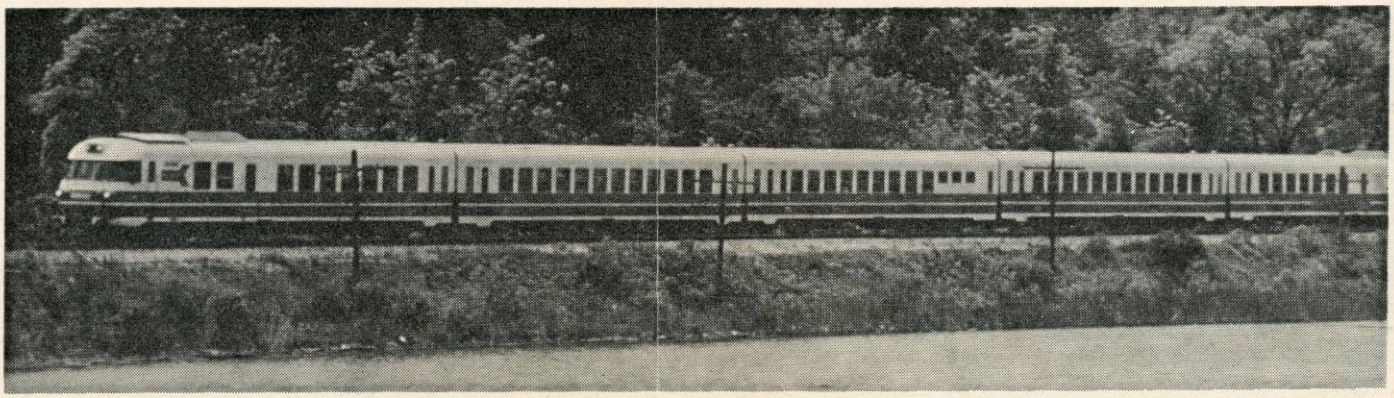
DETROIT-CHICAGO TURBOLINER SERVICE



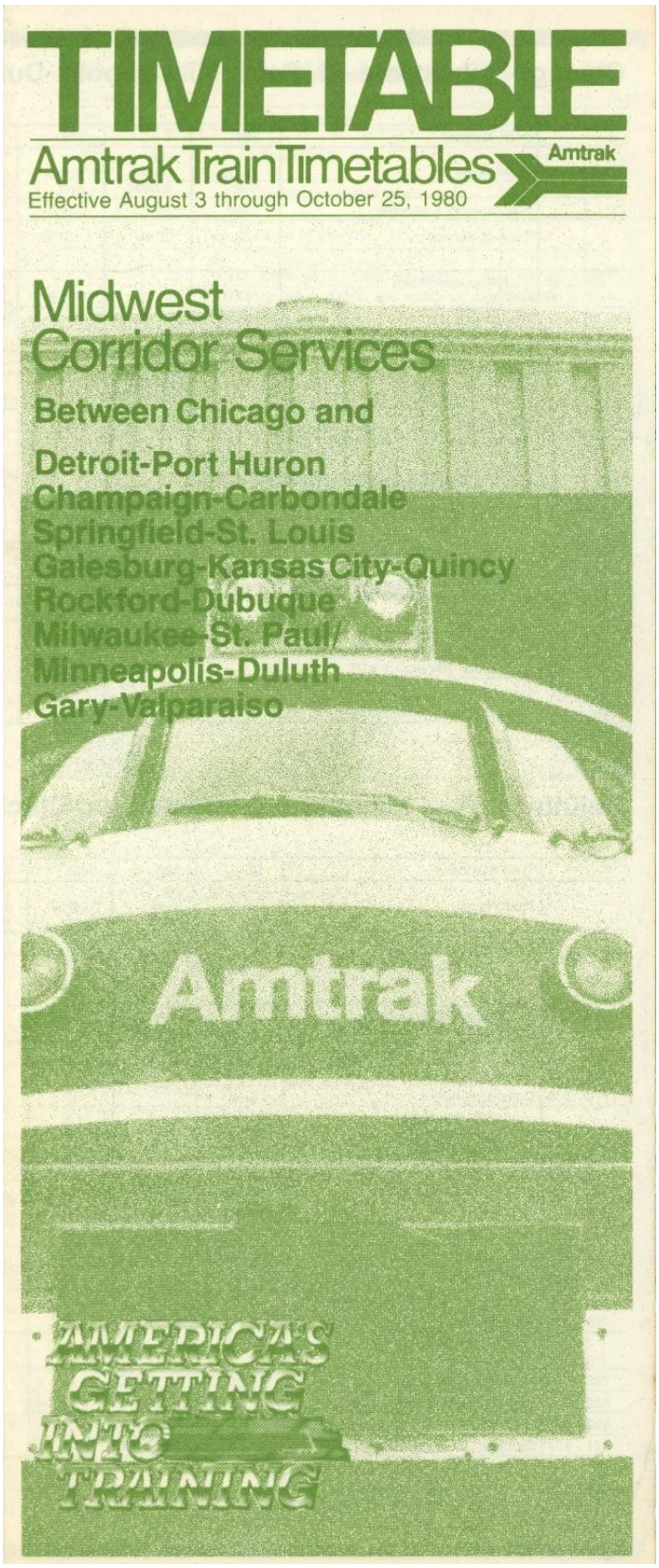
MIDWEST TRAIN TIMETABLES

To find the page number of the timetable for the route you are taking, simply check the appropriate route line with corresponding circled page number on this map. A brief explanation of route line points is given below.

For schedules between—



The "Amtrak Midwest Train Timetables," that were effective on April 25, 1976, did not display a Turboliner on the cover, but featured this full-width photo on page one, visible as soon as a reader opened the 15-page publication. The picture shows Chicago-Detroit Train 350 gliding along the shoreline of the Huron River just west of Ann Arbor, Michigan; and was taken on May 30, 1975. The same photo layout (with blue-tint ink instead of gray) was also used in the following timetable, which was effective on June 15, 1976.



The informational brochure shown directly above, was issued by the Michigan Department of State Highways and Transportation to promote travel on the *Blue Water Limited* Turboliner service between Chicago and Port Huron. Included were descriptions of the train itself, and points of interest along the route.

AMTRAK

Quick Reference Timetable

Effective April 26 through October 24, 1981

Amtrak

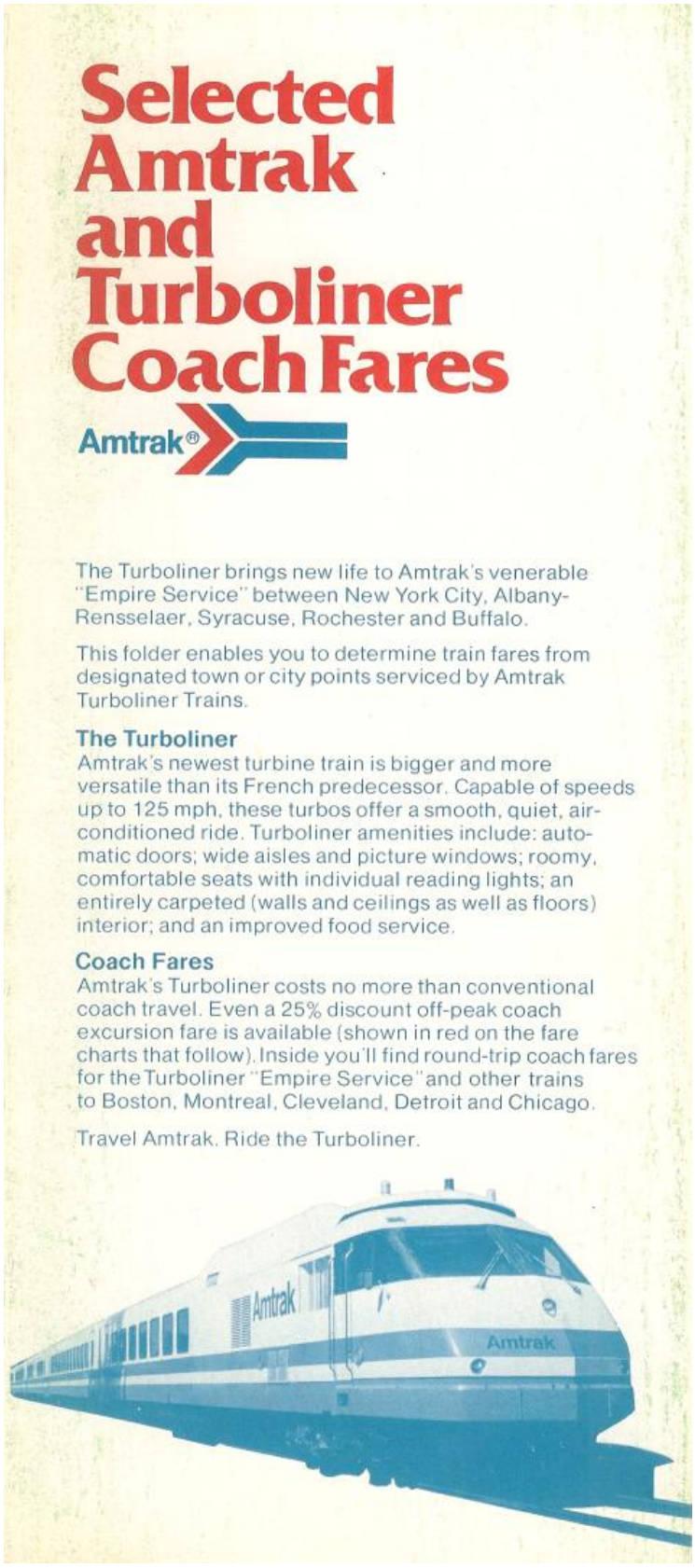
Milwaukee, WI

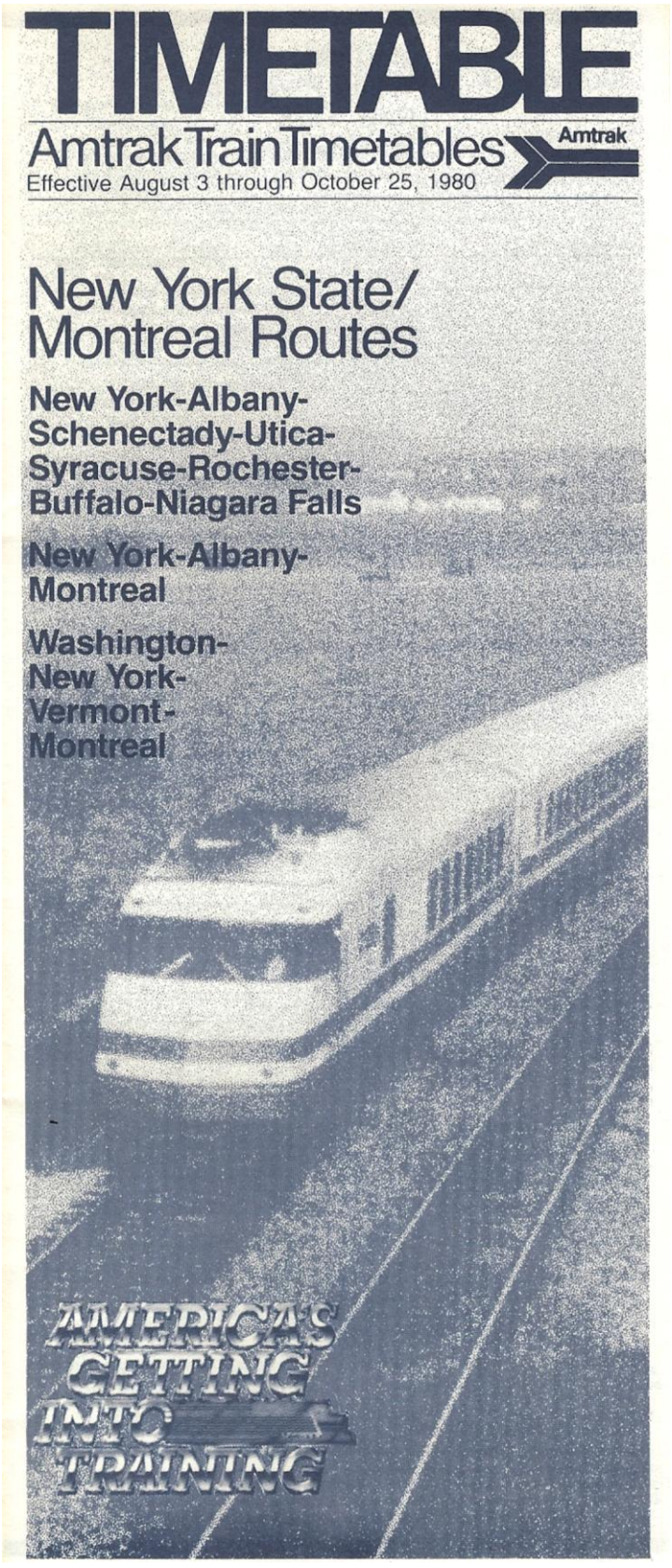
Amtrak Station, 433 W. St. Paul Ave.
For reservations and information, call:
In Milwaukee 933-3081. Elsewhere in Wisconsin 800-621-0353

The final Midwestern Turboliner-depicting timetable took effect on April 26, 1981, and was supposed to remain in effect through October 24, 1981. However, all Turboliner equipment made its final runs on Midwestern routes on September 8, 1981, and was replaced by conventional locomotive-hauled equipment such as Amfleet.

Eastern Regional and Route-Specific Timetables/Brochures

(Shown in order of publication date)





AMTRAK

Quick Reference Timetable

Effective April 26 through August 1, 1981

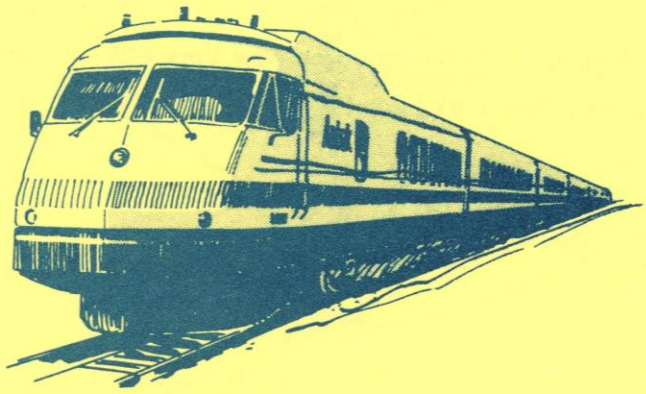
Amtrak

New York, NY

Pennsylvania Station, 8th Ave. between 31st & 33rd sts.
Grand Central Terminal, 42nd St. & Park Ave.
City Ticket Office, 12 W. 51st St.
For Metroliner Service reservations and information, call:
In New York City 736-3967. Elsewhere in N.Y. State & New Jersey 800-523-8720.
In Connecticut 800-523-8760.
For all other reservations and information, call:
In New York City 736-4545. On Long Island 981-9100. Elsewhere in N.Y. State & New Jersey 800-523-5700. In Connecticut 800-523-5720.

"You CAN get there from here!"

A Rail Travellers' Guide To Local Transportation in the *Empire Corridor*



I ♡ NY

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION

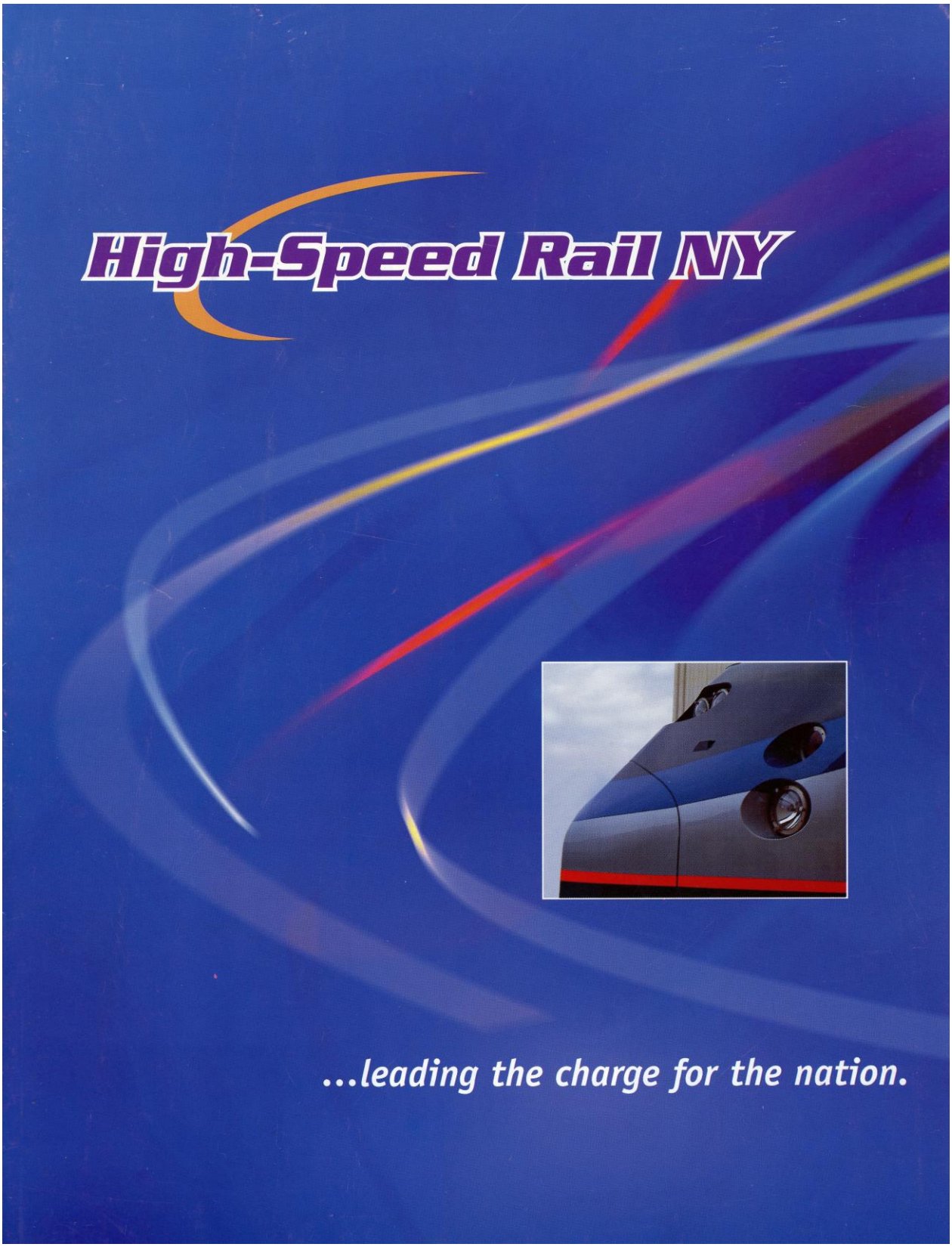
The brochure shown above right, and on the following page, was produced by the New York State Department of Transportation in 1982. Within its 31 pages, the *Guide* contained detailed information for 15 stops on the Empire Corridor that included intercity rail and connecting local and intercity bus and commuter rail service, car rental agencies near the rail station, local accommodations and attractions, and detailed maps. Also included (as shown below) was a segment highlighting the RTL I Turboliner equipment used on the Empire Corridor route.

A NEW ERA IN TRAIN TRAVEL

A steady stream of improvements by Amtrak and the State Department of Transportation over the last several years has produced a rail system of which every New Yorker can be proud. Trains in New York now operate at speeds of up to 110 miles per hour, resulting in the shortest schedules ever and the fastest in North America. Through its New York State Routes, Amtrak now provides service between 26 communities in New York and many important points beyond, including Toronto, Montreal, Cleveland, Chicago, and Boston. From the most modern train fleet in the country, to new or improved stations and free parking lots, the key work is "better".

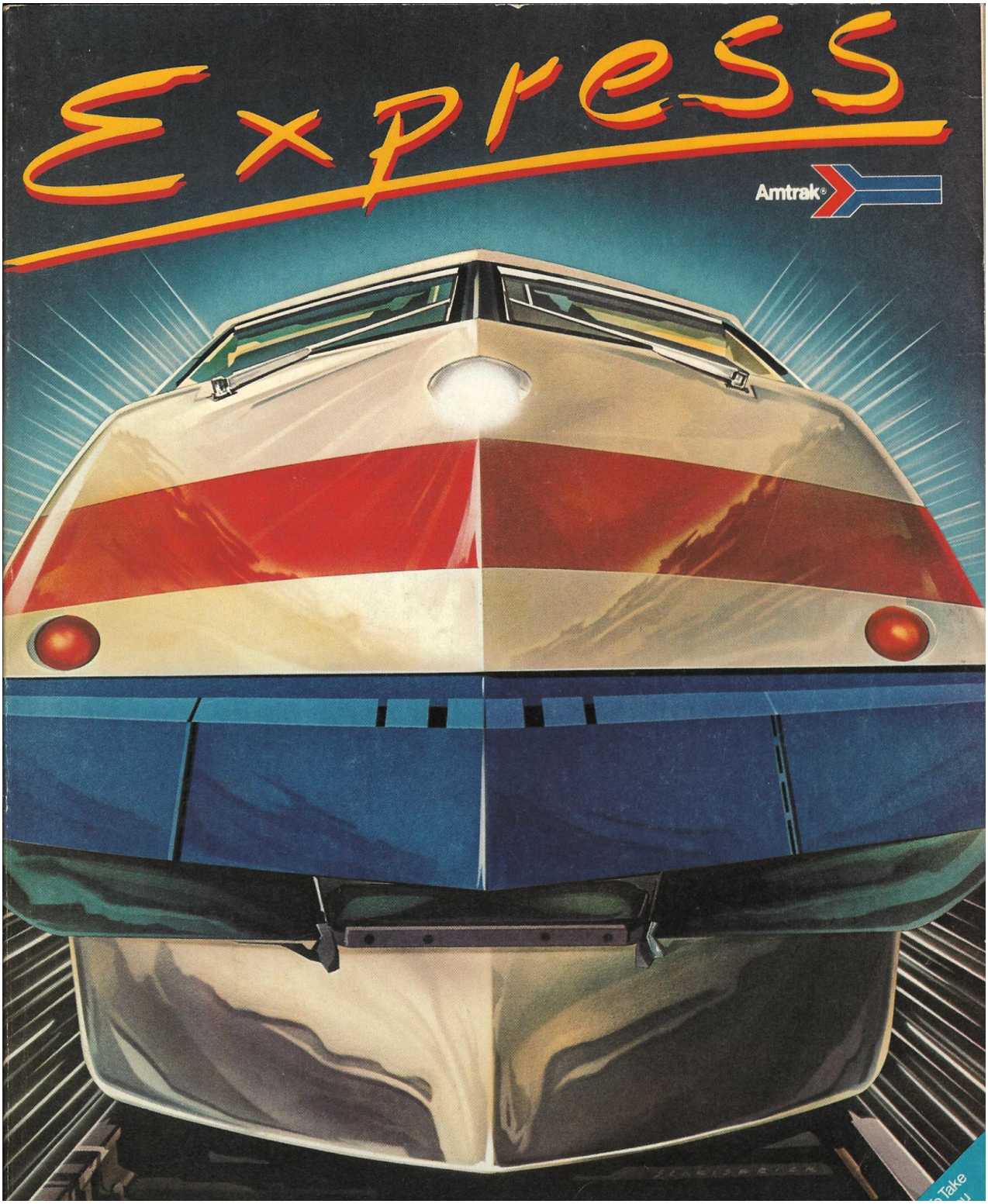
Back in the mid 1970's it was a far different story. Rail service and facilities had deteriorated to an alarming point. Railroads had divested their passenger services to a newly created Amtrak, which simply did not have the resources to reverse several decades of decline. The Arab oil embargoes helped to underscore the need for renaissance.

New York's voters responded to this plight by passing two bond issues directed at improving our precious rail freight, passenger and commuter services. Since then, investments approaching $100 million in state bonds and other funds have been made for the benefit of improved passenger services. Improved they are! Discover for yourself the new age of the train in New York State.

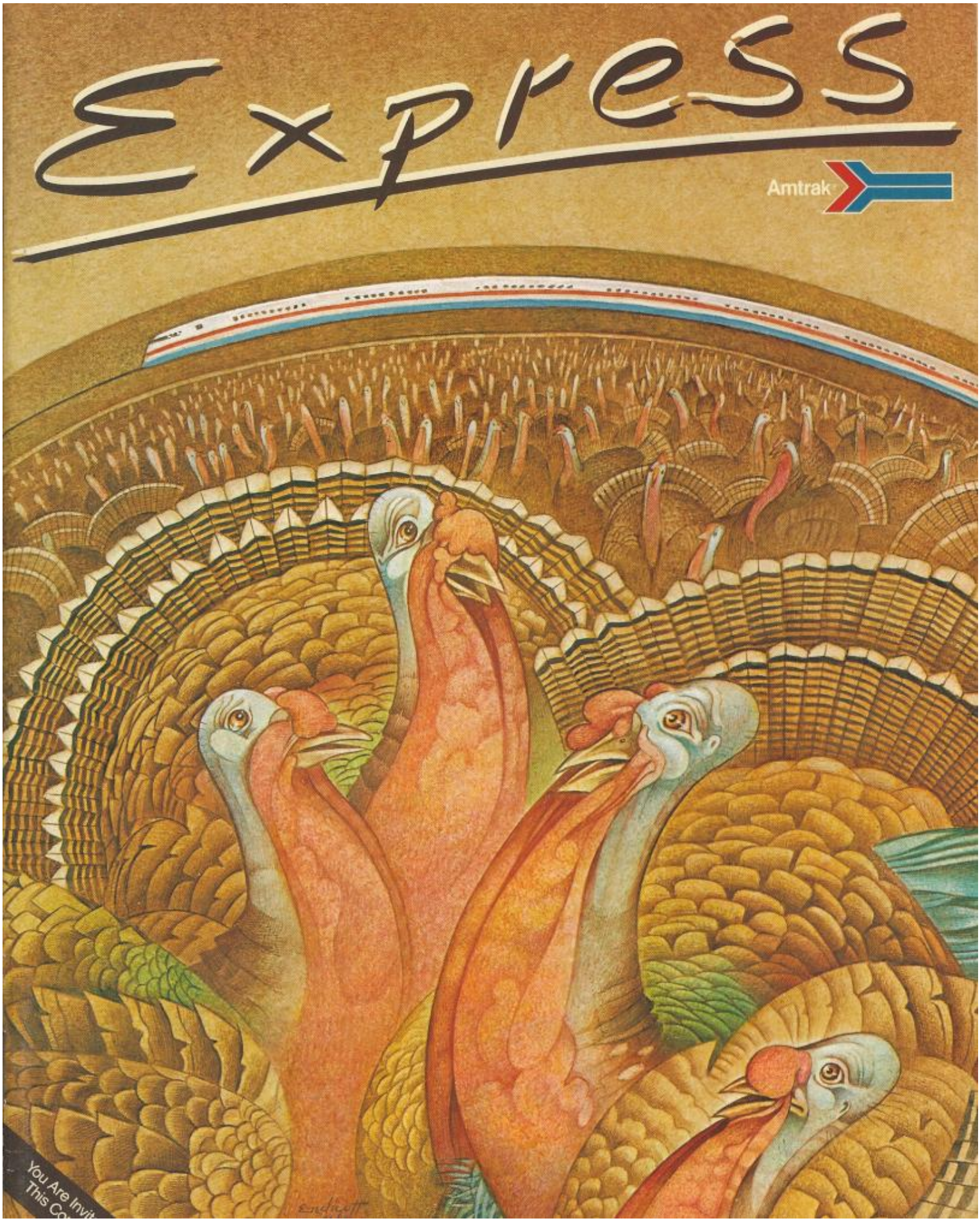


The image above shows the cover of a seven-page booklet produced by the New York State Department of Transportation to overview and promote what was introduced in 1998 as the *High Speed Rail Improvement Program*. The program included two major components: *First*, rebuilding the seven RTL Turboliner trainsets so they would be usable for 125 mph service, and meet then-current federal safety and accessibility standards (this portion of the program was called the *Turboliner Modernization Project*). *Second*, make related rail infrastructure improvements that would allow the rebuilt Turboliners to travel at their maximum capable speed, and achieve the travel times envisioned. The entire publication can be found in the second Turboliner book.

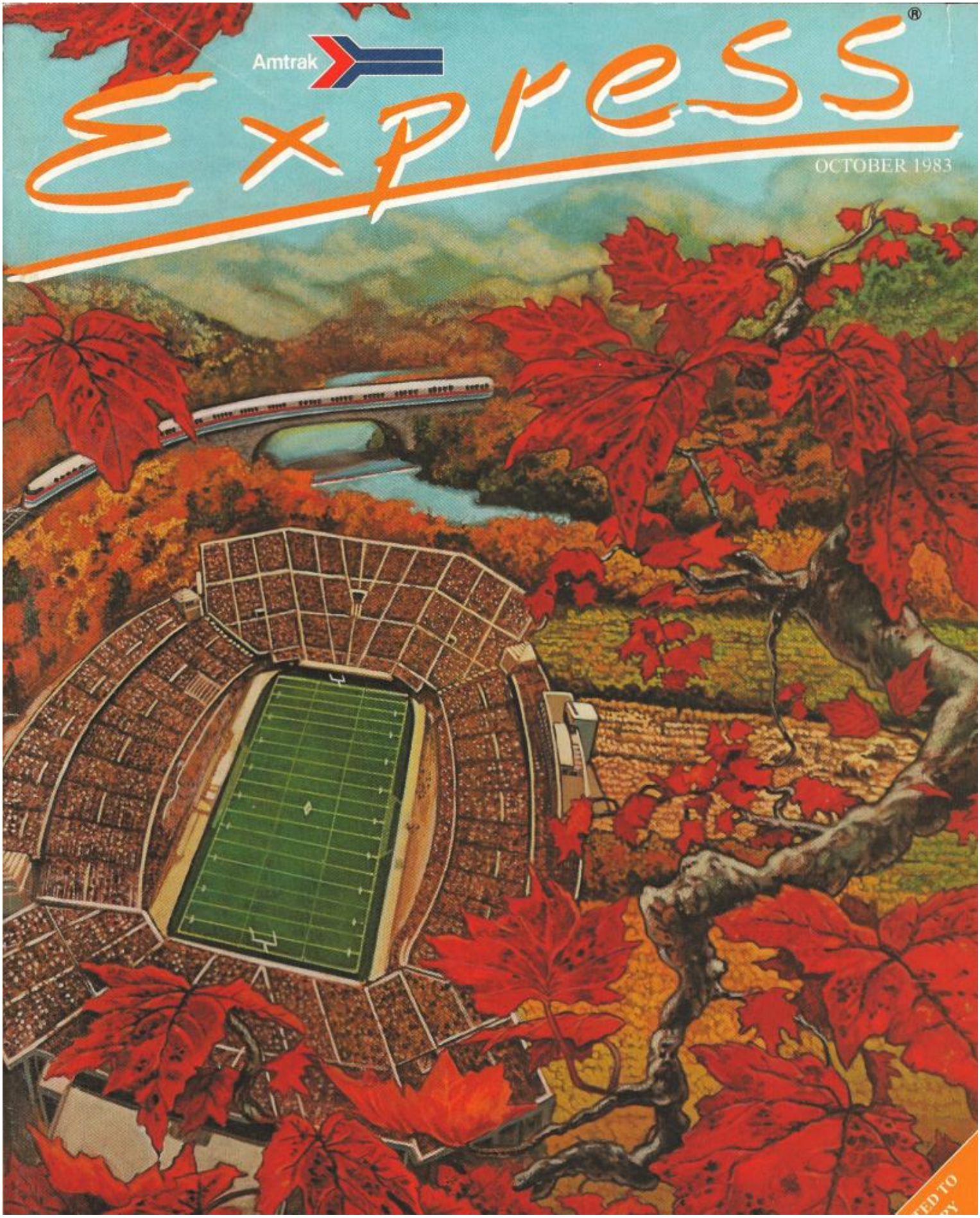
Turboliner Express Magazine Covers



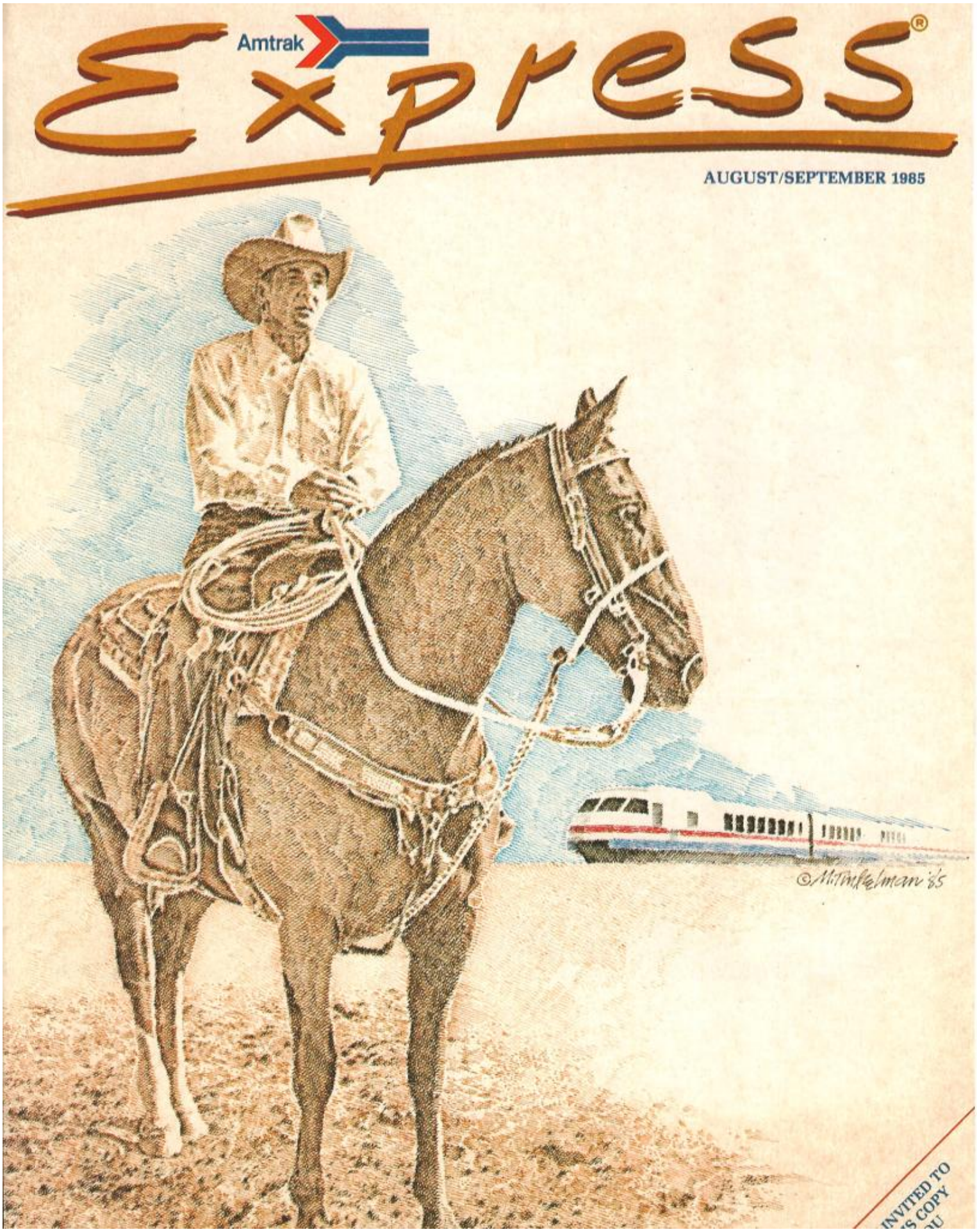
To celebrate Amtrak's tenth anniversary, the May 1981 issue of *Express* magazine, a publication distributed to passengers on board Amtrak trains, featured the image of an RTL I Turboliner; dramatically portrayed by artist Ed Scarisbrick. Through the years, other *Express* covers included Turboliner subject matter on a number of occasions. Four examples of these, with the dates indicated, are shown on the following pages.



November 1981



October 1983

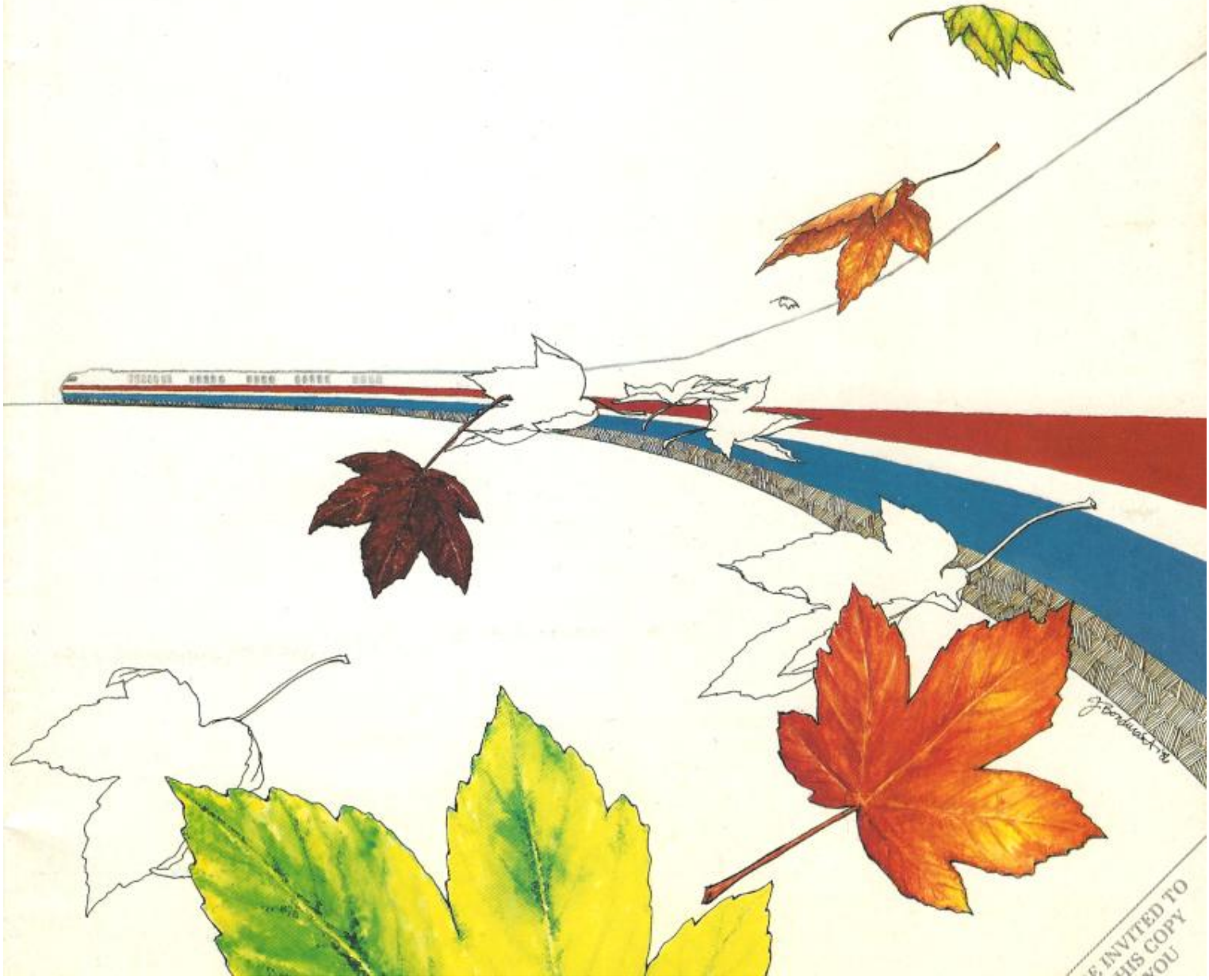


August/September 1985

Amtrak

Express®

OCTOBER/NOVEMBER 1986



October/November 1986

Turboliner Posters

The earliest Amtrak-distributed Turboliner poster, shown above, measured 12x18 inches in size, and utilized a photo of the first-received RTG trainset. The scene was recorded at Pittsburgh Union Station in August 1973, during the consist's delivery trip from Port Elizabeth, New Jersey to Chicago. The poster became available in Fall 1973, and was distributed during the September 28, 1973 Chicago-St. Louis RTG I Turboliner Preview Trip.

The above poster, originally issued in 1977, not only pictured a new RTL I trainset of the type recently introduced on New York State routes, but also promoted Turboliner service on Midwestern routes; which used RTG I equipment. This poster was re-issued in 2022 under license by Amtrak to Rapido Trains; coinciding with Rapido's manufacture of HO-scale models of Amtrak RTL Turboliner equipment.

The final officially-sanctioned Turboliner poster, shown above, was 14x18 inches in size, and featured a painting by artist J. Craig Thorpe. Titled *Souls Of The Empire State*, the work was commissioned by the New York State Department of Transportation. Released in 2001, when hope for the Turboliner Modernization Project was still high, the colorful fall scene depicted the first RTL III trainset racing along the east bank of the Hudson River near Garrison, New York, with the United States Military Academy at West Point in the background. The lower edge of the original full-frame poster included the painting title, and the caption, "The Storied Hudson River Valley Once Again Hosts A Famous Train: A New York State High Speed Turboliner." The same painting was also used on sets of single-fold, 4-1/2x6-1/4-inch note cards; with the front side of each folded card showing the painting itself, and the back side containing information about the significance of the painting title.

<u>NOTE</u>: Photos and descriptions of additional Turboliner posters, which are not part of the Turboliner Memories historical collection, can be found in both the first and second Turboliner books.

Turboliner Food and Beverage Service

AMTRAK TURBO

A Brief Introduction

Seating
Should you wish to have the further comfort of a reclined seat, simply hold the arm rests and gently press back.

Dining
On the reverse, you will find an ample menu presented for your enjoyment. The dining area is located in the center of the train.

Refreshment
A selection of beverages is available in the bar service area located in both end cars.

Rest Rooms
They are located in each car near the entrance doors. A single unit is provided in each car.

Entrain/Detrain
Note that the step down is somewhat high in relation to the platform level. To overcome this your Service Attendant will put a step platform in place at each stop. Please stand clear of these steps until otherwise instructed by your Service Attendant.

WELCOME ABOARD and BON VOYAGE!

LES MENUS

Petits Dejeuners — Available until 11:00 A.M.

Continental Breakfasts	.75
Club Breakfasts	From 1.50
Coffee Companions	From .30

Diners — Available after 11:00 A.M.

Turbo Salads	From 1.75
Sandwiches	From 1.25
Beef Bourguignon	2.75
Southern Fried Chicken	2.75

Assorted Beverages and Desserts

The Turboliner Buffet is located in the center of this train.

Aperitifs, Highballs and Cordials are available (according to local liquor statutes) at our "Sidewalk Cafes" located at either end of the train.

May we invite you to enjoy our Champagne Turboliner Inaugural Cocktail, available at either "Cafe" for 1NF or U.S. $.25, local currency.

BON APPETIT!

Shown above are both sides of a combined menu and train information card used during the early weeks of Chicago-St. Louis RTG Turboliner service. Note the use of French terminology to capitalize on the uniqueness of the trains' heritage.

The photo to the left shows the interior of the 24-seat food service area of RTG I, Group 1 *Bar-Grill* car 94, during the Chicago-St. Louis Preview Trip on September 28, 1973.

As shown on page 113 of the first Turboliner book, wall-mounted menus (some Turboliner-specific) were also used in food service cars. It is not known if any such menus still exist.

Complimentary coffee and tea are available for your pleasure.

From the Bar

Cocktails and Cordials	$1.50
Beer and Ale	.80
Beer (Premium)	.90
Wine (Split)	1.25
Dry Roasted Peanuts	.40

Sandwiches

All American Hero	1.75
Ham and Cheese on a Sesame Roll	1.25
Grilled Hamburger	1.00
Turkey on Whole Wheat	1.00
Roast Beef on a Sesame Roll	1.25

Snacks & Beverages

Danish Pastry	.40	Yogurt with Fruit	.75
Doughnut	.25	Chilled Juice	.30
Potato Chips	.40	Pound Cake	.40
		Candy Bars	.20
Milk (white or chocolate)	.30	Soft Drinks (regular or diet)	.40

Major credit cards accepted

Amclub/Turboclub Lunch and Dinner

MANICOTTI
with Meat Sauce
Garlic Bread
Three Bean Salad
Dessert
Coffee or Tea
$2.95

Baked Boneless
BREAST OF CHICKEN
Noodles Romanoff
Green Beans
Three Bean Salad
Dinner Roll and Butter
Dessert
Coffee or Tea
3.95

May we suggest a split of Mateus Rose with your meal — 1.25

Prices include all state and local taxes

LD 2/77

Shown above is a February 1977 Lunch and Dinner menu used in first-class Turboclub service. Menu selections were rotated monthly. For a period of time in early 1978, complimentary meals were offered to Turboclub passengers on certain trains operating on the New York-Buffalo route, as a marketing tool to promote premium-level service.

The photo to the left shows a Turboclub attendant serving passengers at their seats.

Good Morning

May we offer you a good morning cocktail, Bloody Mary or Screwdriver $1.50.

Egg Dishes

#1 Chilled Fruit Juice
Two Eggs, Any Style
Choice of Bacon or Sausage
English Muffin or Toast, Butter and Jelly
Coffee, Tea or Milk $2.75
with Ham $3.10

OR

#2 Chilled Fruit Juice
Two Eggs, Any Style
Home Fried Potatoes
English Muffin or Toast, Butter and Jelly
Coffee, Tea or Milk $2.25

OR

#3 Chilled Fruit Juice
Fluffy Three Egg Omelette, filled with Jelly or Cheese
Choice of Bacon or Sausage
English Muffin or Toast, Butter and Jelly
Coffee, Tea or Milk $3.25
with Ham $3.60

#4 *Amtrak Special*
Chilled Fruit Juice
Choice of:
Golden Browned French Toast
or
Three Buttermilk Pancakes with Butter and Syrup
Choice of Bacon or Sausage
Coffee, Tea or Milk $2.75
with Ham $3.10

Menu prices include all state and local taxes.
Major credit cards accepted.

A La Carte

Appetizer
Chilled Fruit Juice .55
Stewed Prunes .65
Fruit in Season
Half Grapefruit .70
Melon .75
Fresh Fruit .70

Cereals
Assorted Dry Cereal .60
with Fresh Fruit .75
Hot Cereal .60

Hot Off the Griddle
Three Golden Brown Buttermilk Pancakes 1.25
Browned Corned Beef Hash with Poached Egg 1.65

Side Orders
Rasher of Bacon .90
Three Pork Sausage Links .90
Ham—Tender Sugar Cured 1.25
Eggs—One, Any Style .75
Two, Any Style 1.25
Served with Toast, Butter and Jelly
Home Fried Potatoes .50

Breads
Danish Pastry, Warmed .45
English Muffin, Butter and Jelly .45
White, Whole Wheat or Rye Toast, Butter and Jelly .45

Beverages
Coffee, Sanka or Tea—Pot .50 Cup .35
Hot Chocolate .40 Milk .35

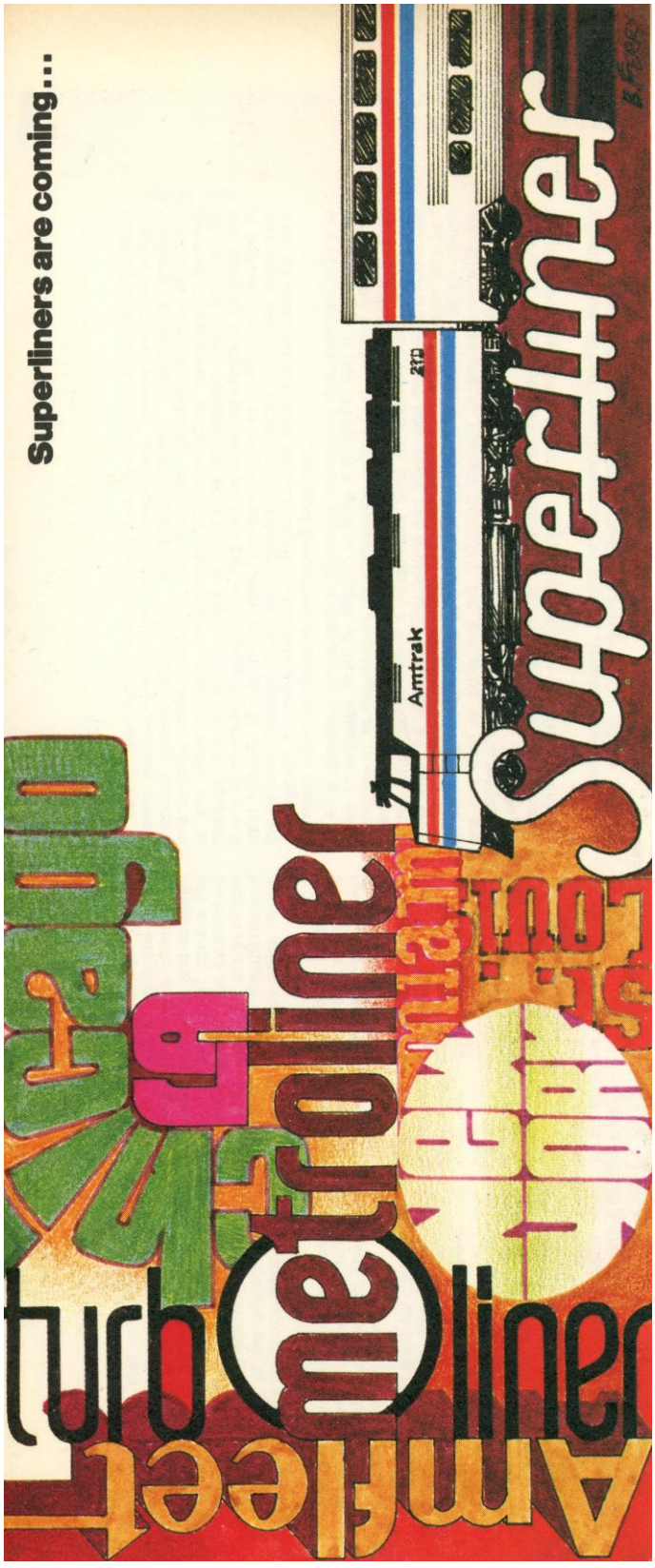
From the old glory days of passenger rail travel by the mighty steam locomotive of the 1890's (left) to the new glory of today's modern rail travel aboard Amtrak's Turboliner (upper left), one most enjoyable and unique tradition of passenger rail travel has been a sit-down breakfast aboard the train. Amtrak proudly maintains this tradition and wishes you a satisfying breakfast and a pleasing journey.

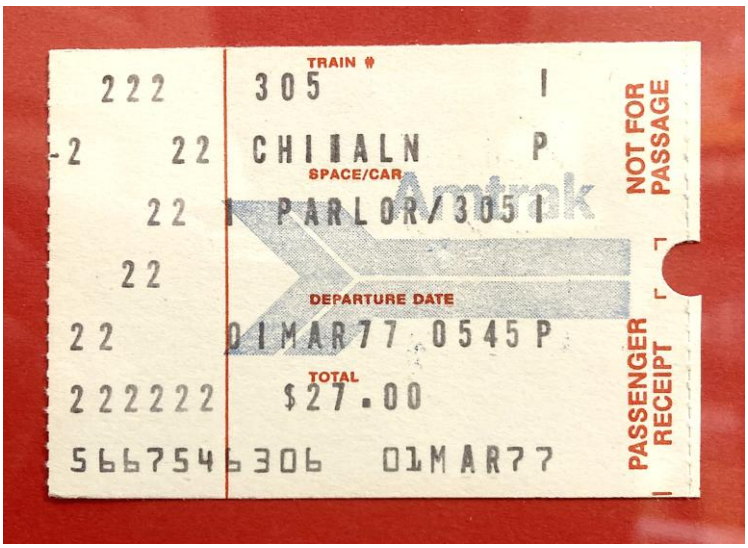
NRPC PM1 5/77

A final menu of interest is Turboliner-related, but was never used aboard a Turboliner. Amtrak used the 12x17-inch paper placemat breakfast menu shown above, issued in May 1977, to build RTL Turboliner fleet awareness among passengers riding on conventional-equipment long-distance trains. The caption at the bottom of the menu read as follows.

> **From the old glory days of passenger rail travel by the mighty steam locomotives of the 1890s (left) to the new glory of today's modern rail travel aboard Amtrak's Turboliner (upper left), one most enjoyable and unique tradition of passenger rail travel has been a sit-down breakfast aboard the train. Amtrak proudly maintains this tradition and wishes you a satisfying breakfast and a pleasing journey.**

Turboliner Tickets





Shown above, is the receipt stub from a first-class Turboclub seat ticket for a trip from Chicago to Alton, Illinois aboard Chicago-St. Louis Train 305 on March 1, 1977. On this occasion, a Turboliner was substituting for the usual conventional equipment on the run.

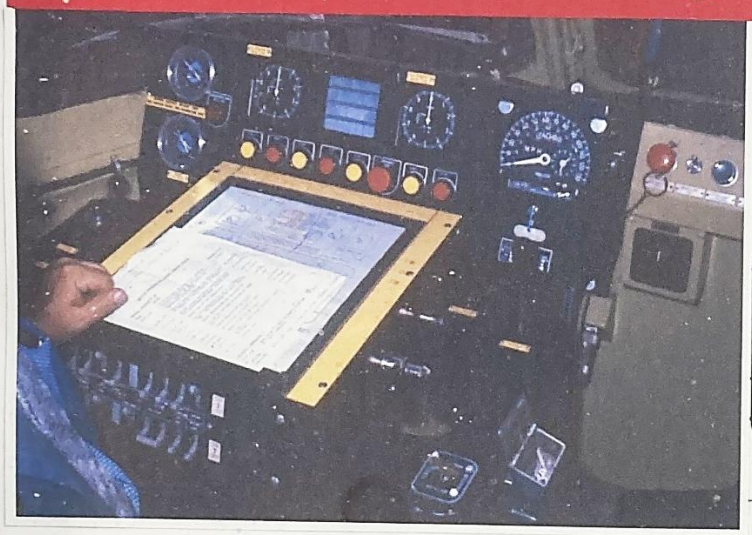
To the left, is a ticket envelope used by Amtrak in March 1979. Note the mention of Turboliner equipment.

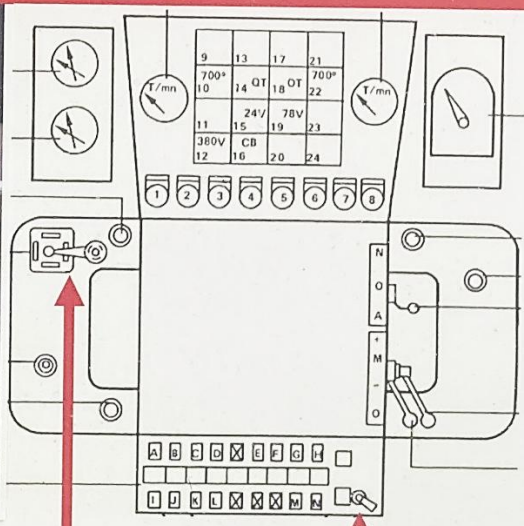
As shown below, boarding passes were also sometimes used on Midwestern routes to address the problem of too many people attempting to ride a fixed-capacity Turboliner; a particular issue on routes with multiple large colleges and universities.

Ticket time on the Turboliner.

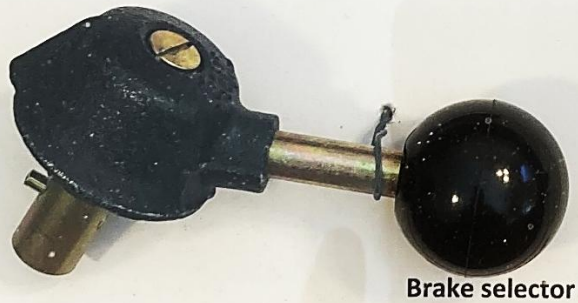
Turboliner Equipment Artifacts

RTG I Turboliner Engineer Control Desk Keys





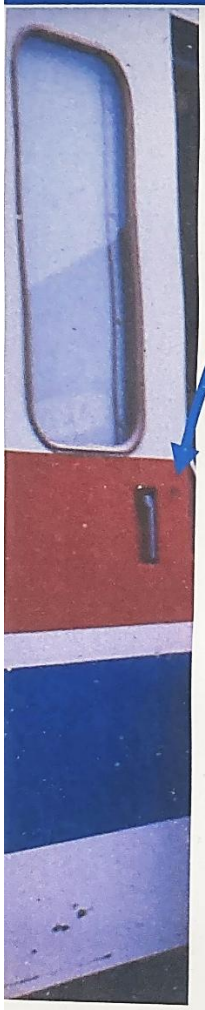
The photo and diagram show the engineer's control desk layout in an RTG I cab car. The two trains delivered in 1973 (as seen in the photo) placed controls on the *left* side of the cab; while the four trains received in 1975 moved controls to the *right* side.

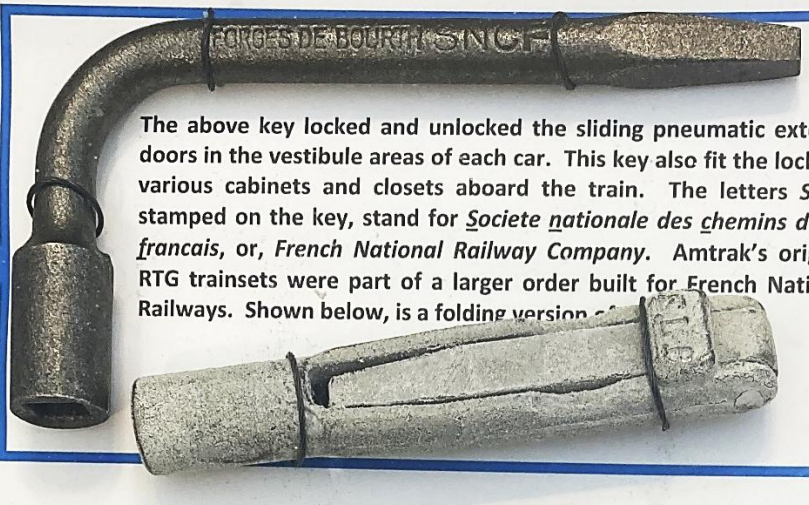


Brake selector key

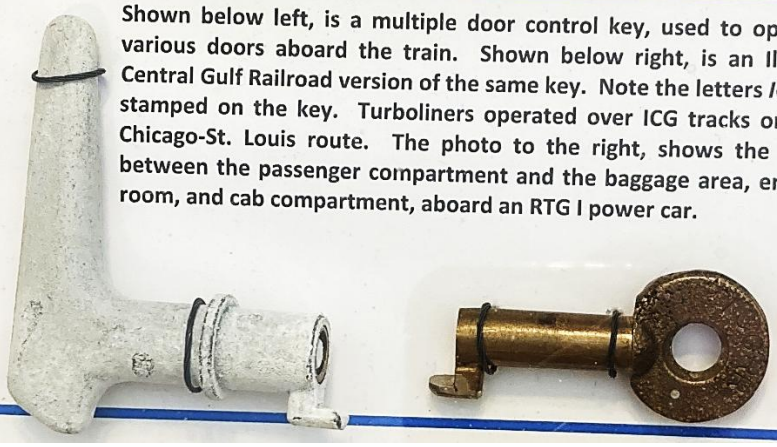
Controls release key. Unlocks the toggle switches on the lower front portion of the engineer's control desk.

RTG I Turboliner Door and Cabinet Keys

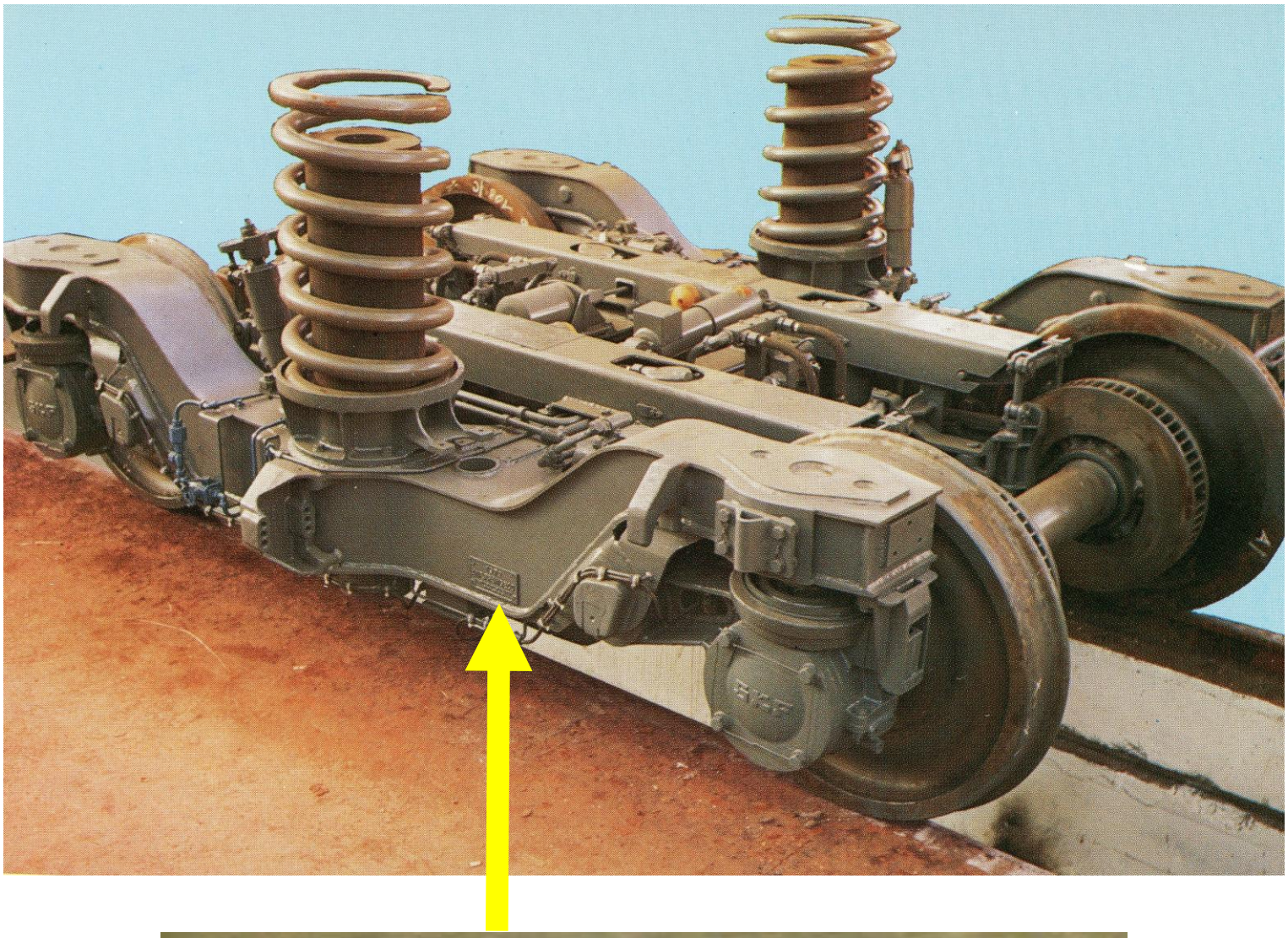




The above key locked and unlocked the sliding pneumatic external doors in the vestibule areas of each car. This key also fit the locks on various cabinets and closets aboard the train. The letters *SNCF*, stamped on the key, stand for *Societe nationale des chemins de fer francais*, or, *French National Railway Company*. Amtrak's original RTG trainsets were part of a larger order built for French National Railways. Shown below, is a folding version [illegible]



Shown below left, is a multiple door control key, used to operate various doors aboard the train. Shown below right, is an Illinois Central Gulf Railroad version of the same key. Note the letters *ICGRR* stamped on the key. Turboliners operated over ICG tracks on the Chicago-St. Louis route. The photo to the right, shows the door between the passenger compartment and the baggage area, engine room, and cab compartment, aboard an RTG I power car.



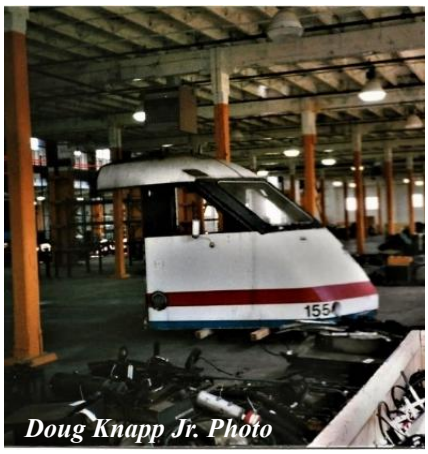
Immediately above, is a cast brass builder's plate from one of Amtrak's first two RTG I Turboliner trainsets. The plate, which was originally mounted to the body of a wheelset (see indicated placement as shown in top photo), displayed the date of the train's manufacture; the name of the primary manufacturer; and the location of the train's construction.

James Hidaka photo

The Brighton Park and Albany-Rensselaer facilities provided routine maintenance, interior refurbishing, mechanical repair, and most collision damage repair for Amtrak's turbine-powered fleet. In contrast, the primary contribution of the Beech Grove, Indiana shop complex to the Turboliner saga was that of major car rebuilding; with secondary roles of major collision damage repair and equipment storage.

Undoubtedly the largest and most comprehensive Turboliner-related project undertaken by Beech Grove personnel was the total rebuilding of three RTG I trainsets (15 cars), plus one spare coach, between 1986-1990, into RTG II equipment for New York State Empire Corridor service. The hat shown was produced for Beech Grove employees who were involved in the rebuild program. Pictured on the hat is RTG II Power Car 67, part of the first consist completed (July 1987). ANF was the French company that built the original RTG I cars from which the new trainsets were created.

Rohr Industries Photo—Raul Bravo Collection



Doug Knapp Jr. Photo

Delivered in the Fall of 1976, RTL I Power Car 155 contained 27 first-class Turboclub seats, upholstered in a rich red, velvet-textured fabric (above center photo). As documented in the second Turboliner book, Car 155 had a storied history of almost 20 years in Empire Corridor passenger service during its RTL I life.

With the coming of the Turboliner Modernization Project in 1998, Car 155 became one of the first pieces of equipment to be "de-constructed" (above right photo) for rebuilding as part of the initial RTL III production trainset. Fortunately, one of the Turboclub seats was saved from scrapping when the interior of Car 155 was gutted. This seat utilized a blue fabric that was the final version used in the car's RTL I service (written documentation provided by the Superintendent of the Albany-Rensselaer Maintenance Facility). A tag placed on the back of the seat by RTL III rebuilder Super Steel also documents the seat as being from Car 155.

In 2022, the seat was refurbished, as shown in the photo to the left, and became part of the Turboliner Memories historical collection.

Turboliner Scale Models

RTG Scale Models

French manufacturer Jouef produced the first scale model RTG I equipment in Amtrak livery in 1975 (a French National Railways version was available earlier), which was offered in four-car trainsets, as shown in the above photo. Each set consisted of two power/coach cars (only one of which contained an electric motor), one full coach car, and one coach/bar-grill car. In actual Amtrak service, the prototype RTG Turboliners normally operated as *five*-car sets. Therefore, to accurately model equipment use on Amtrak's Midwestern Turboliner routes, one would have had to secure an additional full coach car. Probably the most noticeable difference in appearance between the full-scale RTG I Turboliner and the Jouef HO-scale replica is the model's lack of the four small windows on the food service end (aisle side) of the bar-grill car. Through the years, modelers have used the Jouef cars as a starting point to create: (1) more detailed miniature replicas of the same RTG I equipment, (2) RTG II equipment, and even (3) RTL I equipment. For examples of these custom creations, see pages 80-83 in the second Turboliner book.

RTL Scale Models

In 2023, 19 years after an Amtrak Turboliner transported its final revenue passenger, what was undoubtedly the most highly-anticipated, commercially-produced Turboliner scale model became available. Following years of planning, promotion, and careful research, Rapido Trains successfully brought to market their HO-scale model of the Rohr RTL I Turboliner used by Amtrak in Empire Corridor service. Based on original equipment blueprints and diagrams, in-the-field measurements, and extensive photographs, these highly-detailed and accurate models include: full interior, underbody, and truck details (including third rail electric power pickup shoes); working headlights, marker lights, and cab-mounted strobe lights; and actual Turboliner sound effects in DCC versions. Rapido also offers such models in N-scale. The above photos show a Rapido produced and provided HO-scale model of Power Car 154 in early RTL I livery. Car 154 was part of the first RTL I trainset to arrive at Albany-Rensselaer, New York (on July 22, 1976) following a cross-country trip from the Rohr factory in Chula Vista, California.

As shown below, the Rapido Turboliner models have been made available in four distinct liveries. From left to right in the photo, these include: RTL I late Phase 3 (the revised livery used in the later years of RTL I operation), RTL I early Phase 3 (the as-delivered livery), RTL III (an RTL III livery painted on an RTL I body, without the prototype RTL III cab and car design changes, due to prohibitive re-tooling costs for the scale model), and the special RTL I livery used for power cars 154 and 158 during their X2000 escort service in 1992-1993. --- *Rapido Trains photo*