

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration
(FRA Emergency Order No. 1 -
Amendment 2, Flexi-Van Cars)

Emergency Order No. 1, which prohibited the use by any railroad of Mark III and IV Flexi-Van cars with cracks in the center-sill members, was effective on September 27, 1972. The Penn Central Railroad, principal operator of Flexi-Van cars, developed a repair and modification for the cars which were prohibited from operation by the order.

The three areas of concern on these cars were as follows:

1. The inboard platform cross member connection at the center sill.
2. The air brake reservoir bracket connection at the center sill.
3. Bumper guard connection at the center sill.

Modification consisted of repair by welding of the cracked areas and the application of reinforcing plates over the welds. The repair was tested using strain gages, in both a Static Load Test and Over-The-Road Train Test.

One car with no cracks in the center sills, one car with center-sill cracks and the repaired car were each subjected to static load tests, dynamic impact tests and an over-the-road test that simulated actual train operating conditions. Strain gage readings were taken at critical locations on each car. Stresses in the repaired car were significantly lower than in the other two cars.

The Federal Railroad Administration inspected the repaired cars and reviewed the repair procedure as well as test results. The repair consisted of the removal of all cracks by air gouging and welding, and the application of substantial metal patches over the effected areas.

Accordingly, I have concluded that the repaired cars should be allowed to return to service subjected to periodic inspections to detect further cracking.

Emergency Order No. 1 - Amendment 2

Therefore, effective immediately, the Emergency Order No. 1 concerning Flexi-Van cars issued on November 22, 1972, is amended by adding the following:

A railroad may use any car listed in Table A of this amendment provided:

1. Each car in Table A is modified in accordance with the procedure contained in a letter from Mr. J. M. McGuigan, Chief Mechanical Officer, Penn Central Transportation Company on November 20, 1972, file 20.7.8.11 and the attached Exhibits 1 through 8.
2. Between 25,000 and 30,000 miles of service, after the effective date of this amendment, each car in Table A has been inspected for cracks.
3. Between 50,000 and 55,000 miles, 50 cars taken at random, have been inspected as shown in Item 2.
4. Between 85,000 and 90,000 miles, 50 cars, including 10 cars that were inspected between 50,000 and 55,000 miles, have been inspected as shown in Item 2.
5. Between 115,000 and 120,000 miles, 50 cars, including 10 cars that were inspected between 85,000 and 90,000 miles, have been inspected as shown in Item 2.

A report of the above inspections will be forwarded to the Administrator within 30 days of the completion of each mileage increment. Any car showing signs of cracking or evidence of excessive strain, may not be used and the Federal Railroad Administration must be notified immediately.

Table A

Flexi-Van Cars Subject To This Amendment

Owner	Designation	Car Number		Totals
		Old Series	New Series	
PC	Mark III	NYC-504000- 504999	PC-776000- 776460	416
		NYC-9700- 9799	PC-777700- 777799	97
	Mark IV	NYC-504430- 504525	PC-777419- 777525	38
		MFVX-6800- 6999	-	191
		MFVX-9500- 9699	-	194
MILW (Lessee)	Mark III	NIFX-7025- 7049		25
		Total		1011

Except as provided herein, the Emergency Order remains in effect and consist of the original order and Amendment No. 1 and No. 2.