

STATEMENT OF RALPH L. STANLEY, ADMINISTRATOR
OF THE URBAN MASS TRANSPORTATION ADMINISTRATION,
BEFORE THE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION,
SUBCOMMITTEE ON INVESTIGATIONS AND OVERSIGHT, OF THE
UNITED STATES HOUSE OF REPRESENTATIVES
ON APRIL 27, 1984

Mr. Chairman, Members of the Subcommittee. I appreciate this opportunity to address the Subcommittee with respect to the recent and permanent withdrawal from service of Grumman Flexible buses by the New York City Transit Authority (NYCTA) and related issues. I am accompanied this morning by Alfred A. Delli Bovi, the Deputy Administrator of the Urban Mass Transportation Administration (UMTA); G. Kent Woodman, UMTA's Chief Counsel; Peter Benjamin, UMTA's Associate Administrator for Technical Assistance; and George Parker, the Associate Administrator for Enforcement of the National Highway Traffic Administration.

On Tuesday, February 7, 1984, NYCTA withdrew on a permanent basis, and without prior notice to Congress or UMTA, 851 Grumman Flexible Corporation Model 870 buses from service. During a press conference that afternoon, David L. Gunn, the President of NYCTA stated that "It has reached the point where we can't guarantee the safety of these vehicles, I don't want to expose passengers to the risk of that bus." Although the grant agreements under which NYCTA received approximately \$73 million to purchase these buses specifically indicate that NYCTA was obligated to notify UMTA immediately upon or before removing grant equipment from mass transportation service, the only notice UMTA received of NYCTA's actions was through the media. Moreover, NYCTA neither notified nor sought advice from the National Highway Traffic Safety Administration (NHTSA), the appropriate Federal agency to address the

issue of safety in the Model 870's. In fact, NYCTA has failed to respond to NHTSA's recent request by phone for information regarding the safety issue raised by NYCTA. These actions appear hasty, rash, and fiscally irresponsible.

Despite the unprecedented fashion in which we received notice of this major action, UMTA took immediate steps to ascertain the situation in New York and evaluate the possible impact on grantees throughout the country. On February 14, I directed UMTA's Senior Mechanical Engineer, a representative of UMTA's Safety and Security Office, and several members of UMTA's New York Regional Office to conduct a field inspection at NYCTA's East New York Garage. During the inspection, UMTA staff examined two Model 870 buses which NYCTA had prepared for their review. UMTA staff had to conduct a second field inspection on February 21, 1984, in order to examine the bus which had been damaged by fire and a bus which newspaper reports stated, and NYCTA staff confirmed, had a 2 1/2 to 3 foot long crack in the floor. NYCTA admitted that the fire damage resulted from a maintenance problem and not from a vehicle design defect. As for the bus which NYCTA claimed had a 2 1/2 to 3 foot long crack, the bus actually had two cracks, one approximately 8 inches long and the other 3 to 4 inches long.

Based on evidence gathered during the two trips by the UMTA inspection team, it appears that NYCTA's unilateral decision to remove all of the Flexible's from service on a permanent basis can only be described as precipitous.

As a result of NYCTA's action, we immediately began efforts to estimate the extent of possible problems relating to the Flxible 870 buses throughout the country. Shortly after the February 7 incident, UMTA's Safety and Security staff contacted transit authorities in Atlanta, Tampa, Santa Clara, and Fort Wayne which operate the 870 buses and requested information on panhard rod bracket cracks and floor cracks, which were the two alleged safety defects mentioned in the media accounts of the New York incident. Atlanta had experienced loose bolts on the panhard rod brackets of four buses in its fleet of 133; Santa Clara had experienced a wheel well crack on one bus in its fleet of 219; and Tampa and Fort Wayne reported no cracks in their fleets of 40 and 23 buses respectively.

UMTA also received information on February 16, 1984, from the Flxible Corporation on Flxible's recent inspection of panhard rod brackets on 870 buses from 36 transit authorities. During its inspection, Flxible sampled 2,567 Model 870 buses. The inspection revealed that 2,450 of the buses, or approximately 95 percent of the sample, had no cracks in the brackets.

In addition, UMTA recently conducted a more comprehensive survey of all UMTA grantees, other than NYCTA, which operate Grumman Flxible buses. The results of that survey did not indicate any significant structural problem with these buses.

Based upon all the information currently available to UMTA from our inspections in New York, from our sampling of other grantees, from NHTSA, and from Flxible, there does not appear to be any basis for further UMTA action with regards to the safety of Grumman Flxible 870 buses.

In order to give the Subcommittee a better appreciation for the situation before us, I believe that it would be helpful for me to provide a brief history of the Grumman Flxible 870 Advanced Designed Bus and Transbus.

A 1968 report by the National Academy of Engineering stated that more reliable, easier to board and more attractive buses were needed to halt a chronic decline in ridership. The report served as the basis for a Department of Transportation (DOT) decision to undertake the Transbus program which began in 1971. Under that program, American Motors General (AM General), General Motors (GM) and Flxible each built three prototypes, which were delivered for testing in 1974. The National Academy of Engineering report also encouraged GM to develop a new bus, separate from Transbus, which it called the RTS II. Flxible also initiated design of a new bus, which would become the 870, to compete with the GM entry.

In mid-1975, UMTA concurred in specifications drawn up by a consortium of six grantees, led by Houston, Texas, to solicit bids for a new type of bus. GM, with its RTS II, was the only bidder. After the award to GM, AM General filed suit against UMTA, claiming the specification was restrictive and violated section 3(a)(2)(C) of the Urban Mass Transportation Act which provides that no grant or loan funds may "be used to support procurements utilizing exclusionary or discriminatory specifications." The ruling in the case, made in April 1977, upheld the consortium's action.

Flxible completed the design of the 870 coach in July 1976 and began engineering tests in early 1977. The Flxible 870 and the GM RTS II are

commonly known as advanced design buses (ADB). Because of the marked differences in design and production cost between the two buses, UMTA was encouraged by the transit industry to provide a means to permit the two buses to be bid against each other. UMTA considered such action necessary to prevent a rash of future protests similar to that filed by AM General. In March 1977, DOT Secretary Adams announced that UMTA would issue a specification for soliciting ADBs and that use of this specification was to be mandatory for the purchase of ADBs with Federal funds. I would like to stress to this Subcommittee that UMTA never required transit agencies to purchase ADBs, but if they did conduct a procurement for these buses, they were required to use the specification which applied to all bidders. These performance specifications were based on the designs already developed independently by GM and Flxible and have been commonly known as the "White Book."

UMTA then contracted with a nationally recognized multi disciplinary consulting firm, Booz Allen and Hamilton, to develop the "White Book." As a performance specification, the "White Book" provided numerous and extensive performance factors for the ADBs, but did not state how the buses should be designed or constructed in order to meet these requirements. Draft copies of the specifications were given to the American Public Transit Association (APTA) Bus Technology Committee, comprised of 11 grantees; GM; Flxible; and AM General for review and comment. NYCTA was represented on that group by Anthony Carrano. The "White Book" represented a consensus of the transit operators as members of the APTA Committee, the bus manufacturers, and UMTA. The "White Book" was issued in April 1977. It is important to emphasize that

the "White Book" was produced primarily to permit orderly procurement and only after ADBs had been designed by GM and Flxible and were in testing or production.

After introduction of the "White Book," the policy covering the procurement of buses other than ADBs did not change. Transit authorities continued to procure other buses with UMTA funds based on locally prepared specifications. While some have suggested that UMTA mandated purchases of ADBs, more than 3000 other full-size transit buses were purchased with UMTA funds by transit authorities, including the Massachusetts Bay Transportation Authority (MBTA), which purchased 408 non-ADB's. Most of these buses were bid during Mr. Kiley's and Mr. Gunn's tenure at the MBTA.

A major feature of the "White Book" specification had been the use of price offsets. Price offsets gave manufacturers credit in evaluation of bids where their buses exceeded the baseline specification. They were issued by UMTA as an integral part of the "White Book" in April 1977. For example, if a manufacturer used stainless steel, a specified amount was deducted from the bid price. The concept was to encourage innovations and product improvements. In addition to the price offsets was a weight incentive, which was initiated, and included in the original and all subsequent versions of the "White Book," to encourage fuel economy. It did not require any design changes, but gave credit to manufacturers who did have a lighter bus. With the exception of safety sections, the "White Book" specification was withdrawn in October 1982, as a mandatory requirement in the purchase of ADBs in order to minimize Federal involvement in local decision-making.

The first Flxible 870 was introduced into transit service in Atlanta in June 1978. By December 1980, 2,800 of the 870's were in use throughout the country. The first major problem with the vehicles surfaced in the fall of 1980 when NYCTA discovered cracks in the "A" frames of several vehicles in service in New York City. In response to this discovery, Grumman notified all Flxible 870 customers of potential "A" frame related structural failures. By December 26, 1980, New York, Los Angeles, and Chicago had removed all their Flxible 870 vehicles from service. In all, more than 1,000 vehicles were removed from service due to concerns over structural failures involving the "A" frame, the engine cradle, the trunnion and the front mechanical assembly.

Grumman initiated an extensive analysis and test program to diagnose the problem and to evaluate alternative solutions. The solution ultimately adopted by Grumman consisted of welding reinforcements to the structure and improving quality control. Grumman's corrective action program, which began in December 1980 and was completed by November 1982, included a modification of all buses delivered up until that time and a redesigning of all 870 buses that Grumman was building. Grumman also extended the warranty on the Flxible 870 "A" frame and engine cradle from 3 years or 150,000 miles to 6 years or 300,000 miles. NYCTA, however, has not chosen thus far to avail itself of remedies provided by Grumman's extended warranty.

At the time of the discovery of the "A" frame problem, an UMTA safety review team made up of UMTA technical staff and representatives of the Transportation Safety Institute, the Transportation Systems Center (TSC), the Federal Highway Administration and NHTSA investigated the structural problems and the proposed

Grumman Flexible solution. Based on this investigation, the safety team, in cooperation with Grumman, developed a program to analyze and test Grumman's modifications to the Model 870 buses. Pursuant to the program, Grumman subjected the "A" frame and engine cradle to rapidly repeated load cycles based on instrumented readings obtained from vehicle operations on New York streets; Grumman subjected two buses to the equivalent of 500,000 miles of revenue service under a test plan developed jointly by Grumman, NHTSA, and UMTA with assistance from TSC; TSC conducted an independent structural analysis of the modifications; UMTA and the Chicago Regional Transit Authority carried out a full vehicle computer modeling analysis; and APTA performed a survey on bus operation. The results of this program supported Flexible's claim that their solution was adequate.

The New Jersey Transit Corporation hired an expert to evaluate the 870 redesign and testing program. As a result of this independent analysis and recommendations, New Jersey Transit proceeded with the acceptance and delivery of an order of 270 Flexible 870 vehicles. NYCTA established an independent panel of experts to review the adequacy of the structural modifications proposed by Grumman. The panel of structural engineers, acting as consultants to NYCTA, reviewed the proposed Grumman modifications and accepted them. Based on the certification of this panel, the modified buses were returned to service in New York.

As a result of these well-published difficulties, during this period UMTA was faced with four specific procurements in which Grumman Flexible was the low bidder and the grantees involved requested UMTA's concurrence in an award to the second low bidder.

More specifically, NYCTA is bound by the Property Management Standards of Attachment N to the Office of Management and Budget (OMB) Circular A-102 or specific grant language which is similar to Attachment N.

In the absence of evidence that the Model 870's are unsafe, in view of NYCTA's unilateral decision to remove the vehicles from service, and in view of the continued failure by NYCTA to include UMTA and the Congress in the formulation of a disposition plan, if there is one, NYCTA is obligated to reimburse the Federal Government in proportion to the Federal share.

That concludes my prepared statement. I am willing to answer any questions that the Subcommittee may have.