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NEW FLYER

23 March 2012

VIA EMAIL and MAIL

Jennifer Timian
Chief - Recall Management Division
US DOT – National Highway Traffic Safety Administration
Office of Defects Investigation (NVS-215)
1200 New Jersey Ave. SE,
Washington, DC 20590

Subject: **New Flyer Safety Recall Declaration -**
BAE HybriDrive® Systems with A123 Li-Ion Energy Storage Systems (Li-Ion ESS).

Dear Ms. Timian:

New Flyer Industries Canada ULC and New Flyer of America Inc. (together "New Flyer"), is declaring recall status with regards to a potential failure of the Li-Ion Energy Storage Systems (Li-Ion ESS) which are manufactured by A123, and utilized in hybrid drive propulsion systems designed by BAE Systems.

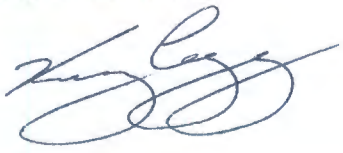
BAE Systems has informed New Flyer that, over time, particulate debris can accumulate in the Li-Ion ESS. Accumulated debris in conjunction with moisture can breach the electrical isolation of the high voltage battery pack. If the battery pack isolation is breached at both sides of the battery, a conductive path could form. This can result in the unintentional discharge of the battery's stored energy, creating a risk of smoke, melting and charring, possibly resulting in fire.

To date, New Flyer has not experienced any thermal events, on buses equipped with BAE Systems' HybriDrive® propulsion systems.

New Flyer will contact the customers who purchased buses identified as having the potential fault, and will coordinate the incorporation of a recommended remedy by BAE Systems once parts and personnel are available. New Flyer is filing the appropriate 573 defect report (see attached) and will manage all quarterly reporting for this recall.

If you have any further questions please contact me.

Sincerely,
NEW FLYER OF AMERICA INC.
NEW FLYER INDUSTRIES CANADA ULC



By: Kerry Legg
Vehicle Safety & Regulatory Compliance Manager
Corporate Headquarters
(204) 224-6706

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711 Kernaghan Ave.
Winnipeg, Manitoba
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R2J 4B9 Canada
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Crookston Facility
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Crookston, Minnesota
56716 USA
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St. Cloud, Minnesota
56301 USA
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www.newflyer.com

Safety Defect and Noncompliance Report Guide for Vehicles

PART 573 Defect and Noncompliance Report[1]

On 16 March 2012, New Flyer Industries Canada ULC [MFR] decided that a defect which relates to motor vehicle safety exists in the motor vehicles listed below, and is furnishing notification to the National Highway Traffic Safety Administration in accordance with 49 CFR Part 573 Defect and Noncompliance Reports.

Date this report was prepared: 23 March 2012

Furnish the manufacturer's identification code for this recall (if applicable): R12-005

1. Identify the full corporate name of the fabricating manufacturer of the vehicle being recalled. If the recalled vehicle is imported, provide the name and mailing address of the designated agent as prescribed by 49 U.S.C. §30164.

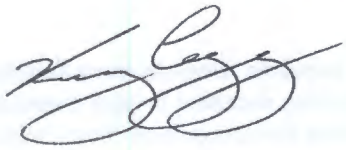
New Flyer Industries Canada ULC
Corporate Headquarters
711 Kernaghan Ave.
Winnipeg, MB Canada
R2C 3T4

Identify the corporate official, by name and title, whom the agency should contact with respect to this recall.

Mr. Kerry Legg
Vehicle Safety & Regulatory Compliance Manager
Telephone Number: (204) 224-6706 **Fax No.:** (204) 224-0248

Name and Title of Person who prepared this report.

Same as above.



Signed:

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[1]Each manufacturer must furnish a report, to the Associate Administrator for Safety Assurance, for each defect or noncompliance condition which relates to motor vehicle safety.

This guide was developed from 49 CFR Part 573, "Defect and Noncompliance Reports" and also outlines information currently requested. Any questions, please consult the complete Part 573 or contact Mr. Jon White at (202) 366-5227 or by FAX at (202) 366-7882.

I. Identify the Vehicle Models Involved in the Recall

2. Identify the Vehicles Involved in the Recall, *for each make and model or applicable vehicle line (provide illustrations or photographs as necessary to describe the vehicle), provide*:

Make(s): New Flyer **Model Years Involved**: 2011 **Model(s): XDE35**

VIN Range: **Beginning**: 038586 **Ending**: 038587

Vehicle Type: Heavy Duty Transit Bus **Body style**: Xcelsior Diesel/Electric Thirty Five Foot

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall: Recalled vehicles have a BAE Systems' HybriDrive® propulsion system utilizing a Li-ion Energy Storage System (ESS) manufactured by A123.

Make(s): New Flyer **Model Years Involved**: 2010 - 2012 **Model(s): XDE40**

VIN Range: **Beginning**: 037548

VIN Range: **Beginning**: 038588 **Ending**: 038602

VIN Range: **Beginning**: 038920 **Ending**: 038926

VIN Range: **Beginning**: 039226 **Ending**: 039277

VIN Range: **Beginning**: 039583 **Ending**: 039592

VIN Range: **Beginning**: 040319 **Ending**: 040320

Vehicle Type: Heavy Duty Transit Bus **Body style**: Xcelsior Diesel/Electric Forty Foot

Descriptive information which characterizes/distinguishes the recalled vehicles from those model vehicles not included in the recall: Recalled vehicles have a BAE Systems' HybriDrive® propulsion system utilizing a Li-ion Energy Storage System (ESS) manufactured by A123.

Identify the approximate percentage of the production of all the recalled models manufactured by your company between the inclusive dates of manufacture provided above, that the recalled model population represents. For example, if the recall involved Widgets equipped with certain items of equipment from January 1, 1996 through April 1, 1997, then what was the percentage of the recalled Widgets of all Widgets manufactured during that time period.

25.1 %

II. Identify the Recall Population

3. Furnish the total number of vehicles recalled potentially containing the defect or noncompliance.

Model	Year	Number of Vehicles Potentially Involved
XDE35	2011	2
XDE40	2010 - 2012	87

Total Number Potentially Affected by the Recall:

89

4. Furnish the approximate percentage of the total number of vehicles estimated to actually contain the defect or noncompliance:

100%

Identify and describe how the recall population was determined--in particular how the recalled models were selected and the basis for the beginning and final dates of manufacture of the recalled vehicles:

All models of New Flyer buses manufactured prior to the filing of this report, which are equipped with a BAE Systems' HybriDrive® propulsion system utilizing a Li-ion Energy Storage System manufactured by A123.

III. Describe the Defect or Noncompliance

5. Describe the defect or noncompliance. The description should address the nature and physical location of the defect or noncompliance. Illustrations should be provided as appropriate.

The Li-ion Energy Storage System (Li-Ion ESS) is located in an enclosure (or "tub") on the roof of the vehicle. Over time, particulate debris can accumulate in the Li-Ion ESS.

Describe the cause(s) of the defect or noncompliance condition.

Accumulated debris in conjunction with moisture can breach the electrical isolation of the high voltage battery pack. A conductive path can be created if the electrical isolation is breached at both ends of the battery.

Describe the consequence(s) of the defect or noncompliance condition.

If the battery pack isolation is breached at both sides of the battery, a conductive path could form. This can result in the unintentional discharge of the battery's stored energy, creating a risk of smoke, melting and charring, possibly resulting in fire.

Identify any warning which can (a) precede or (b) occur.

The BAE HybriDrive® controller may record ground-fault events (error code G045) prior to the failure described above.

If the defect or noncompliance is in a component or assembly purchased from a supplier, identify the supplier by corporate name and address.

BAE Systems
1701 North St.
Endicott, NY 13760

Identify the name and title of the chief executive officer or knowledgeable representative of the supplier:

Scott D. Hatch
Program Manager, Electronic Systems

IV. Provide the Chronology in Determining the Defect/Noncompliance

If the recall is for a defect, complete item 6, otherwise item 7.

6. With respect to a defect, furnish a chronological summary (including dates) of all the principle events that were the basis for the determination of the defect. The summary should include, but not be limited to, the number of reports, accidents, injuries, fatalities, and warranty claims.

On 21 July 2011, BAE Systems contacted New Flyer to inform them of an on-going investigation of thermal events that had occurred on certain vehicle equipped with Li-Ion Energy Storage Systems (Li-Ion ESS). The Li-Ion ESS is manufactured by A123 and sold to BAE Systems. The incidents under investigation occurred on buses manufactured by Daimler Bus North America (DBNA). No injuries or fatalities were reported.

In October 2100, DBNA determined that a defect relating to motor vehicle safety exists in certain hybrid transit vehicles containing the Li-Ion ESS and supplied by BAE Systems (Recall Code 11V-523). New Flyer contacted DBNA to discuss their decision. New Flyer believed that the design of the "tub" for the ESS on the New Flyer buses was sufficiently different from those on the Daimler buses, that the same root cause potential was mitigated.

The issue was closed at New Flyer in November 2011.

On 12 March 2012, BAE Systems contacted New Flyer to discuss a plan to upgrade New Flyer buses that are equipped with the Li-Ion ESS. To date New Flyer had not experienced any thermal events, on buses equipped with BAE Systems' HybriDrive® propulsion systems. Several discussions resulted between New Flyer and BAE with regards to applicability of the BAE recall corrective actions to the New Flyer product.

These discussions resulted in New Flyer deciding to declare recall on 16 March 2012.

7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined.

N/A

V. Identify the Remedy

8. Furnish a description of the manufacturer's remedy for the defect or noncompliance. Clearly describe the differences between the recall condition and the remedy.

An electrical contactor will be installed in the Li-Ion ESS which will be used to break the current flow in the event that the electrical isolation is breached at both ends of the battery. Additionally, the Li-Ion ESS will be modified to disable Li-Ion ESS operation when a breach of the electrical isolation is detected. New Flyer will coordinate the incorporation of this remedy by BAE Systems representatives starting in April 2012. BAE Systems will test and monitor the improvements to validate them on the New Flyer product.

Clearly describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.

The recalled Li-Ion ESS will have a center fuse on the High Voltage battery pack. The remedied Li-Ion ESS will have a contactor in that same location.

Identify and describe how and when the recall condition was corrected in production. If the production remedy was identical to the recall remedy in the field, so state. If the product was discontinued, so state.

Hardware and firmware modifications will be incorporated into production vehicles prior to further shipment of BAE equipped buses to customers.

VI. Identify the Recall Schedule

Furnish a schedule or agenda (with specific dates) for notification to other manufacturers, dealers/retailers, and purchasers. Please, identify any foreseeable problems with implementing the recall.

Recall notifications to owners will be sent out within 10 days of notification receipt of this document from the NHTSA Recalls Office, and the assignment of the Recall Code. New Flyer and BAE will begin recall preventative actions at our customer locations as soon as parts and personnel become available to conduct the retrofits.

VII. Furnish Recall Communications

9. Furnish a final copy of all notices, bulletins, and other communications that relate directly to the defect or noncompliance and which are sent to more than one manufacturer, distributor, or purchaser. This includes all communications (including both original and follow-up) concerning this recall from the time your company determines the defect or noncompliance condition on, not just the initial notification. ***A DRAFT copy of the notification documents should be submitted to this office electronically or by Fax (202-366-7882) for review prior to mailing.***
Note that these documents are to be submitted separately from those provided in accordance with Part 573.8 requirements.

IV. Provide the Chronology in Determining the Defect/Noncompliance

If the recall is for a defect, complete item 6, otherwise item 7.

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7. With respect to a noncompliance, identify and provide the test results or other data (in chronological order and including dates) on which the noncompliance was determined.

N/A