

OFFICE OF THE PRINCIPAL  
GLENBROOK NORTH HIGH SCHOOL

To: Dr. Riggle

From: Paul Pryma 

Re: GBN GADGET Field Trip April 21-24, 2010

Date: March 10, 2010

Please read the attached documents from GBN science teacher, Ms. Lynne Zielinski. The winners of NASA's Dropping in Microgravity Environment Competition are invited to travel to the Glenn Research Center in Cleveland, OH. The trip is fully funded by NASA and does not require District funding.

I fully support this trip.

PP:ri

enc.

To: Mr. Paul Pryma  
Dr. Michael Riggle

From: Lynne Zielinski  
Robert Froehlich

Date: March 3, 2010

RE: GADGET National Winning Students Travel at NASA Glenn Research Center

Three GADGET students who entered the NASA DIME (Dropping in Microgravity Environment) Competition have been selected as one of four national winning teams for their project proposal entitled "Electrostatically Charged Particles in a Potential Field". The team has been invited to travel to NASA's Glenn Research Center in Cleveland, Ohio on April 22-23 to participate in DIME Drop Days.

During their visit at NASA Glenn, the team representatives will have their experiment evaluated for safety (participate in a safety review) and then conduct their experiment in the NASA 2.2 Second Drop Tower. Later, the team will analyze their data and present it's results in a presentation to NASA scientists and engineers. In addition, they will tour NASA facilities and participate in workshops.

# GLENBROOK HIGH SCHOOLS

## Travel Requests Requiring Board of Education Approval

I. School GBN ~~X~~ GBS \_\_\_\_\_ GBE \_\_\_\_\_ GBOC \_\_\_\_\_ District \_\_\_\_\_

II. Initiator LYNNE ZIELINSKI Phone \_\_\_\_\_  
 Position GBN SCIENCE Date of Submission \_\_\_\_\_

III. Dates and Times of Leave/Return  
 Total Number of School Days Missed per Person 2  
 Departure Date/Time 4/21 PM Return Date/Time 4/24 DAY

IV. Name of Individuals Participating in Tour: (Attach list if necessary.)  
 Teachers and Staff LYNNE ZIELINSKI ROBERT FROELICIA  
 Students \_\_\_\_\_

V. Description, Destination, and Reason for Trip  
STUDENTS HAVE BEEN SELECTED AS ONE OF 4 TEAMS NATIONALLY TO USE THE NASA 2.2 SECOND DROP TOWER TO PERFORM AND EXPERIMENT AND INTERACT W/SCIENTISTS AT NASA'S GLENN RESEARCH CENTER IN CLEVELAND, OHIO

VI. Cost of Trip  
 Was this trip included in your N<sup>o</sup> Dept. \_\_\_\_\_ Bldg. \_\_\_\_\_ District \_\_\_\_\_ Budget? \_\_\_\_\_

PAID BY NASA

	Total Amount	Per Person	Account #
Registration	PAID	BY NASA	
Lodging			
Meals (Advance)			
Judging		N/A	
Substitute Teacher		N/A	
Transportation			
Air			
Bus/Car			
District Total		N/A	N/A
Cost to Student			N/A

VII. Approval  
[Signature] [Signature] [Signature]  
 Supervisor Principal Superintendent  
5/4/10 3/4/10 \_\_\_\_\_  
 Date Date Date

**Reminder:** No purchases or expenses prior to Board of Education approval.

Form approved by Board of Education 12/15/97.

# NASA News

National Aeronautics and  
Space Administration

Glenn Research Center  
Lewis Field

21000 Brookpark Road, Cleveland, Ohio 44135  
216-433-2901



For Release

January 8, 2010

Jeannette Owens  
Glenn Research Center, Cleveland  
216-433-2990  
jeannette.p.owens@nasa.gov

Stephanie Schierholz/David E. Steitz  
Headquarters, Washington  
202-358-1600  
stephanie.schierholz@nasa.gov,david.steitz@nasa.gov

RELEASE: 10-002

## **NASA CHOOSES STUDENT TEAMS TO DROP SCIENCE EXPERIMENTS**

CLEVELAND -- NASA has selected teams of middle school and high school students to test their science experiments in microgravity competitions that simulate the microgravity in space. High school students will participate in "Dropping In a Microgravity Environment," or DIME, and students in sixth through ninth grades in "What If No Gravity?" or WING.

DIME and WING challenge students to design and build a microgravity science experiment that is tested in a 2.2 second drop tower at NASA's Glenn Research Center in Cleveland. While in free fall, the students' experiments will experience microgravity conditions, as if they were on the International Space Station.

Four high school student teams were selected in the nationwide DIME competition. NASA will provide funding for up to four students and one adult advisor from each team to come to Glenn in April 2010 to conduct its experiment and review the results with Glenn engineers and scientists. While at the center, they will tour Glenn facilities and participate in workshops. Teams were selected from the following high schools:

- Glenbrook North High School in Northbrook, Ill.
- Plattsburgh High School in Plattsburgh, N.Y.
- St. Ursula Academy in Toledo, Ohio
- Tualatin High School in Tualatin, Ore.

Additional high school student teams selected in the DIME competition will ship their science experiments to NASA to be tested in the drop tower. The experiments and the resulting data

will be returned to the teams so they can prepare reports about their findings. Additional DIME teams were selected from the following high schools:

Columbus High School in Columbus, Ga.  
Emerson Preparatory School in Washington  
Glenbrook North High School in Northbrook, Ill.  
Northbrook High School in Houston  
Troy Athens High School in Troy, Mich. (4 teams)

Student teams in sixth through ninth grades were selected for the WING competition. Each team will ship its experiment to Glenn for testing. The experiments and the resulting data will be returned to the teams so they can analyze the experiment results and submit a written report back to NASA. One student team not affiliated with a school was selected from within the community of Basking Ridge, N.J. Additional teams were selected from the following schools:

Crestwood Middle School in Mountaintop, Pa. (2 teams)  
Dunstan Middle School in Littleton, Colo.  
Gate of Heaven School in Dallas, Pa. (2 teams)  
Good Shepherd Academy from the Diocese of Scranton in Kingston, Pa.  
Hanover Area School District in Hanover Township., Pa. (2 teams)  
Hazleton Area School District in Drums, Pa. (2 teams)  
Lake-Lehman School District in Lehman, Pa.  
Northwood Elementary School in Mooresville, Ind.  
Smith Middle School in Troy, Mich.  
Tunkhannock Area Middle School in Tunkhannock, Pa.  
Wyoming Area Secondary Center in Exeter, Pa.  
Wyoming Valley West School District in Kingston, Pa. (2 teams)

These and other NASA educational programs help the agency attract and retain students in science, technology, engineering and mathematics, disciplines critical to space exploration. The Teaching from Space Office at NASA's Johnson Space Center in Houston funds the DIME and WING competitions.

For information about NASA's DIME and WING student competitions, visit:

**<http://spaceflight systems.grc.nasa.gov/DIME.html>**

For more information about NASA's education programs, visit:

**<http://www.nasa.gov/education>**

For information about NASA's Glenn Research Center, visit:

**<http://www.nasa.gov/glenn>**

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# GLENBROOK NORTH HIGH SCHOOL FIELD TRIP REQUEST APPLICATION

FOR OFFICE USE ONLY

Dated Received \_\_\_\_\_  
 Bus Ordered \_\_\_\_\_  
 Van Reserved \_\_\_\_\_  
 Other Transport \_\_\_\_\_

Instructional Trip       Activity Trip

## 1. DESCRIPTION

Describe the trip requested, listing the address(es) of the place(s) to be visited and the itinerary for the trip - include approximate times:

4 GADGET STUDENTS WILL ATTEND NASA GLENN RESEARCH CENTER'S "DROPPING IN MICRO GRAVITY ENVIRONMENT" (DIME) IS IN CLEVELAND OHIO - APRIL 22-23 CONFERENCE WHERE THEY WILL WORK WITH SCIENTISTS. NASA GLOBE

## 2. RATIONALE

Describe the purpose of the trip as it relates to specific course objectives or sponsored activity:

4 STUDENTS WERE SELECTED NATIONALLY TO DROP THEIR EXPERIMENT IN NASA'S 2.2 SECOND DROP TOWER

## 3. CLASS/ACTIVITY INFORMATION (Attach two (2) copies of student list with ID numbers)

Class or Activity: GADGET Number of students: 4  
Chaperones accompanying trip: LYNNE ZIGLINSKI ROBERT FROELICH-TBD

## 4. TRIP INFORMATION

Trip date(s): APRIL 21-24 (APRIL 22-23 CLASSES MISSING)  
Departing from (location): O'HARE APRIL 21 At: EVENING AM PM  
Returning from (location): O'HARE APRIL 24 At: DAY AM PM  
Students released from class: APRIL 22-23 AM PM Time returning to school: ALL DAY AM PM

## 5. TRANSPORTATION INFORMATION

Transportation: Car(s): \_\_\_\_\_ Bus(es): \_\_\_\_\_ Glenbrook 225 Van(s): \_\_\_\_\_  
Other (specify): AIRPLANE Should the bus remain with the trip?  Yes  No  
Permission Waiver Slip Needed?  Yes  No Bookstore Auth. to Collect Needed?  Yes  No

## 6. COST/SUBSTITUTE INFORMATION

Estimated cost of transportation: 4/22A 2345 4/23B 2389 Estimated cost of substitute teacher(s): 36000  
Substitute Needed for Blocks: 1 2 3 4 5 6 7 8 9 10 Lunch 1 2 3 A / B Day  
4/22A 4/23B

[Signature] 3/4/10  
Teacher Requesting Trip Date

[Signature] 3/4/10  
Instructional Supervisor's Approval Date

[Signature] 3/4/10  
Associate Principal's Approval Date

[Signature] 3/4/10  
Activities Director's Approval Date

## Glenbrook High School District #225

### BOARD POLICY: STUDENT TRIPS

7230

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#### Section A - Introduction

The Board of Education believes that structured learning should not be limited to the classroom. Valuable experiences for Glenbrook students exist within and outside the boundaries of District #225. The Board also realizes that additional responsibilities arise whenever students are taken from the school premises. Staff, parents, and students should be aware of these responsibilities and the necessity for reasonable administrative procedures. The physical welfare of our students and staff must always be paramount in our considerations. It shall be the policy of this Board of Education to maintain insurance for the liability of the district, its board members, its employees, and authorized volunteers as a result of student injury, property loss and general liability coverage on student trips. It shall also be the Board's policy to encourage the maintenance of adequate personal automobile liability and medical insurance by our staff members.

#### Section B - Definition of Student Trips

A student trip shall be considered to be a school-sponsored activity away from the school premises usually falling within two major areas.

1. Instructional Field Trips and Extended Classroom:

Instructional field trips provide experiences out of the classroom that are normally carried on during regular class hours and are related to the planned curriculum. In some instances pre- and post-school hours may be utilized.

- a. A field trip implements and/or augments group classroom instruction. Transportation for field trips is restricted by The School Code to Illinois or adjacent states.
- b. An "extended classroom" allows individual students to pursue their studies in various work-related, volunteer, or observation activities outside the classroom.

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### 2. Student Activity Trips:

Student activity trips are connected with regularly sponsored in school or post-school programs and may include but not be limited to the following:

- a. An activity trip as part of an extracurricular activity
- b. A contest (or practice for a contest) between students representing Glenbrook and another secondary school, or between participants in intramural sports (contestants, cheerleaders, marching band, etc.)
- c. A performance or exhibition displaying special talent by an individual or group of students (e.g., band, chorus, etc.)
- d. A convention or workshop in which an individual or group of students representing Glenbrook participate (e.g., student council convention or workshop)

### **Section C – General Parameters**

1. All student trips must be approved by and will be subject to the procedures set forth by the school principal or the designated representative.
2. Recommendation of the principal and approval of the superintendent shall be required for all overnight student trips. Recommendation of the principal and the superintendent and approval of the Board shall be required for all student trips conducted outside the State of Illinois or adjacent states.
3. Funding for student trips shall be in accordance with the guidelines adopted by the Board.
4. No student shall be penalized for non-participation in a class field trip. No student shall be penalized for participation in a class field trip or student activity trip.
5. Reasonable administrative care should be taken to ensure safety and orderly behavior on all student trips. Staff members shall accompany all field trips except “extended classroom” trips.
6. All Board and school policies, procedures and regulations regarding student conduct apply for students on student trips.



**BOARD POLICY: STUDENT TRIPS**

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7. Transportation on all student trips should be by district-owned vehicles or by commercial vehicles, whenever practical. Occasionally, because of a limited number of participating students, private transportation is permissible when approved by the principal or the designated representative. In these instances, travel may be by private automobile, if the driver is a Glenbrook staff member, parent, or student.
8. Students participating in student trips must travel to and from the trip's destination in the school-sponsored mode of transportation unless an exception for good cause is made by the trip's sponsor for the student to be transported by the student, his/her parent or guardian.
9. The Parental Permission Slip and Field Trip Request Application, as specified in the procedures to this policy, shall be used in complying with this policy.

Source: School Code; Section 10-20.19  
10-22.22,  
10-22.29b  
29-3.1

Revised: February 6, 1978  
Revised: September 10, 1984  
Revised: October 28, 1996  
Revised: May 29, 2001  
Revised: July 10, 2006