Massachusetts Space Grant
NE Regional Meeting

October 5-6, 2016
Massachusetts Space Grant Consortium Management

- Director - Jeff Hoffman
- Co-Director - Raji Patel
- Program Administrator - Helen Halaris
<table>
<thead>
<tr>
<th>College &amp; University Members</th>
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<tbody>
<tr>
<td>1. Boston University – John Clarke</td>
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<tr>
<td>2. Bridgewater State University – Martina Arndt</td>
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<td>3. Five College Astronomy Dept – Alexandra Pope</td>
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<td>4. Framingham State College – Irene Porro</td>
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<td>5. Harvard University- Josh Grindlay</td>
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<td>6. MIT - Jeff Hoffman</td>
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<td>7. Mount Holyoke College - Darby Dyer</td>
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<td>8. Northeastern University – Alain Karma</td>
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<td>9. Olin College of Engineering – Christopher Lee</td>
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<td>10. Roxbury Community College – Javad Moulai</td>
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<td>11. Tufts University – Danilo Marchesini</td>
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<td>12. University of Massachusetts, Amherst – Daniela Calzetti</td>
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<td>14. University of Massachusetts, Lowell – Supriya Chakrabarty</td>
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<td>15. Wellesley College – Kim McLeod</td>
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<td>16. Williams College - Jay Pasachoff</td>
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<td>17. Worcester Polytechnic Institute - Nikos Gatsonis</td>
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<td>18. Worcester State College – Matthias Dietrich</td>
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Institutional and Outreach Members

• McAuliffe Center – Irene Poro
• Museum of Science – Paul Fontaine
• Maria Mitchell Observatory – Regina Jorgenson
Summer 2015 - present

143 student fellowships for higher education and research from 13 academic affiliates

Placed 1 student at NASA Centers
82 Fall 2015/Spring 2016/Fall 2017 Fellowships for higher education and research from 11 affiliates

- Boston University - 21
- Bridgewater State University - 11
- Massachusetts Institute of Technology - 9
- Mt. Holyoke - 3
- Olin College - 2
- UMass/Amherst - 17
- UMass/Boston - 1
- UMass/Dartmouth - 4
- UMass/Lowell - 4
- Wellesley College – 5
- Worcester Polytechnic Institute - 5
32 2016 SUMMER FELLOWSHIPS AT:

<table>
<thead>
<tr>
<th>Institution</th>
<th>Quantity</th>
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<tr>
<td>WELLESLEY COLLEGE</td>
<td>1</td>
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<tr>
<td>FIVE COLLEGE ASTRONOMY DEPARTMENT</td>
<td>3</td>
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<tr>
<td>OLIN COLLEGE</td>
<td>4</td>
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<tr>
<td>UMASS/AMHERST</td>
<td>4</td>
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<tr>
<td>WPI (1 AT NASA CENTER)</td>
<td>3</td>
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<tr>
<td>UMASS/DARTMOUTH</td>
<td>2</td>
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<tr>
<td>BRIDGWATER STATE</td>
<td>2</td>
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<tr>
<td>MARIA MITCHELL OBSERVATORY</td>
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<td>UMASS/LOWELL</td>
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<tr>
<td>MIT</td>
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<tr>
<td>BOSTON UNIVERSITY</td>
<td>2</td>
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<tr>
<td>MOUNT HOLYOKE</td>
<td>1</td>
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<tr>
<td>TUFTS UNIVERSITY</td>
<td>2</td>
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Science Club for Girls - Rocketry program
• Workshop in Space Exploration (WiSE)
• BEAR Team
• STEM Conference for Educators – Christa McAuliffe Challenger Conference
• MIT- KSC Program
2013 news clip

“Governor entices airlines to fly out of Logan .... Enabling direct long distance flights to serve all of New England .....”

Investigative information

• MA DOT concerned
• Shortage of aircraft maintenance technicians
• JB had 40 unfilled openings for technicians
• Not enough schools for training       JB ??
MASGC DECISION TO PROVIDE STUDENT SUPPORT FOR AVIATION MAINTENANCE TECHNICIANS

PROPOSAL TO NASA CC GRANT OPPORTUNITY
CAPE COD CC PROGRAM DETAILS

• FAA Approved ( !!!! Oh well, who knew !!!! )
  12-month accelerated program

• Training & preparation for the FAA examinations for certifications for Airframe & Powerplant Technicians
• Financial Aid for qualifying students
• Partnerships with employers
• Associates in Applied Science (AAS) degree to continue education
TRAINING FACILITY LOCATION
PLYMOUTH AIRPORT, PLYMOUTH MA
FUNDING SUPPORT (PUBLIC & PRIVATE)

FEDERAL

- Department of Labor $2.5 M
- National Science Foundation $900K
- MASGC: NASA Student Fellowships

STATE

- MA State Appropriation $1.95 M

INDUSTRY

- Equipment and aircraft $1M
Classrooms
Computer Lab
Airframe Hangar
TRAINING EQUIPMENT
PAINT BOOTH
POWERPLANT HANGAR
2500 Jet Engine donated by Pratt and Whitney
Cessna 402 donated by Cape Air
FACULTY & ADMINISTRATION

FACULTY

Rich Audette  Tom Koury  Rich Lyman
Chad McFall   Bob Nelson

Other

Student Retention Specialist
Receptionist / Administration
Program Elements & Philosophy

- Qualified instructors with vocational experience
- Modern facilities and training equipment
- Evaluation and updating of programs
- Support students through every stage of training to uphold our motto –

“Powerful Futures Start Here”.
INAUGURAL CLASS
ORIENTATION SEPTEMBER 19
(Full class with a wait list)
SOCIAL MEDIA

@ 4CsAviation

Linkedin
MA Space Grant
Thanks for your support  !!!
Long and bumpy ride did not meet NASA Education Office’s timeline for program establishment!

MASGC student funding to CCCC, nevertheless, in support of

Newest Aviation Maintenance Program in the country

One of only four in New England
LATEST BOEING FORECAST

SHORTAGE OF AVIATION MECHANICS!!!

• In North America, Boeing has projected that the demand for aviation maintenance mechanics will exceed **115,000 over the next 20 years**.

• Not enough students are pursuing a career in aviation maintenance to meet this demand.

Program will address one of NASA’s avowed priorities as stated by NASA’s Aeronautics Research Mission Directorate (ARMD) to

“solve the challenges that exist in our nation's air transportation system”,

And, will add to NASA ARMD’s goals of contributing to

“solutions to benefit the flying public every day”.