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

College & University Members

1. Boston University – John Clarke
2. Bridgewater State University – Martina Arndt
3. Five College Astronomy Dept – Alexandra Pope
4. Framingham State College – Irene Porro
5. Harvard University- Josh Grindlay
6. MIT - Jeff Hoffman
7. Mount Holyoke College - Darby Dyer
8. Northeastern University – Alain Karma
9. Olin College of Engineering – Christopher Lee
10. Roxbury Community College – Javad Moulai
11. Tufts University – Danilo Marchesini
12. University of Massachusetts, Amherst – Daniela Calzetti
13. University of Massachusetts, Dartmouth – Robert Fisher
14. University of Massachusetts, Lowell – Supriya Chakrabarty
15. Wellesley College – Kim McLeod
16. Williams College - Jay Pasachoff
17. Worcester Polytechnic Institute - Nikos Gatsonis

18. Worcester State College – Matthias Dietrich

Institutional and Outreach Members

- McAuliffe Center – Irene Poro
- Museum of Science – Paul Fontaine

- Maria Mitchell Observatory – Regina Jorgenson

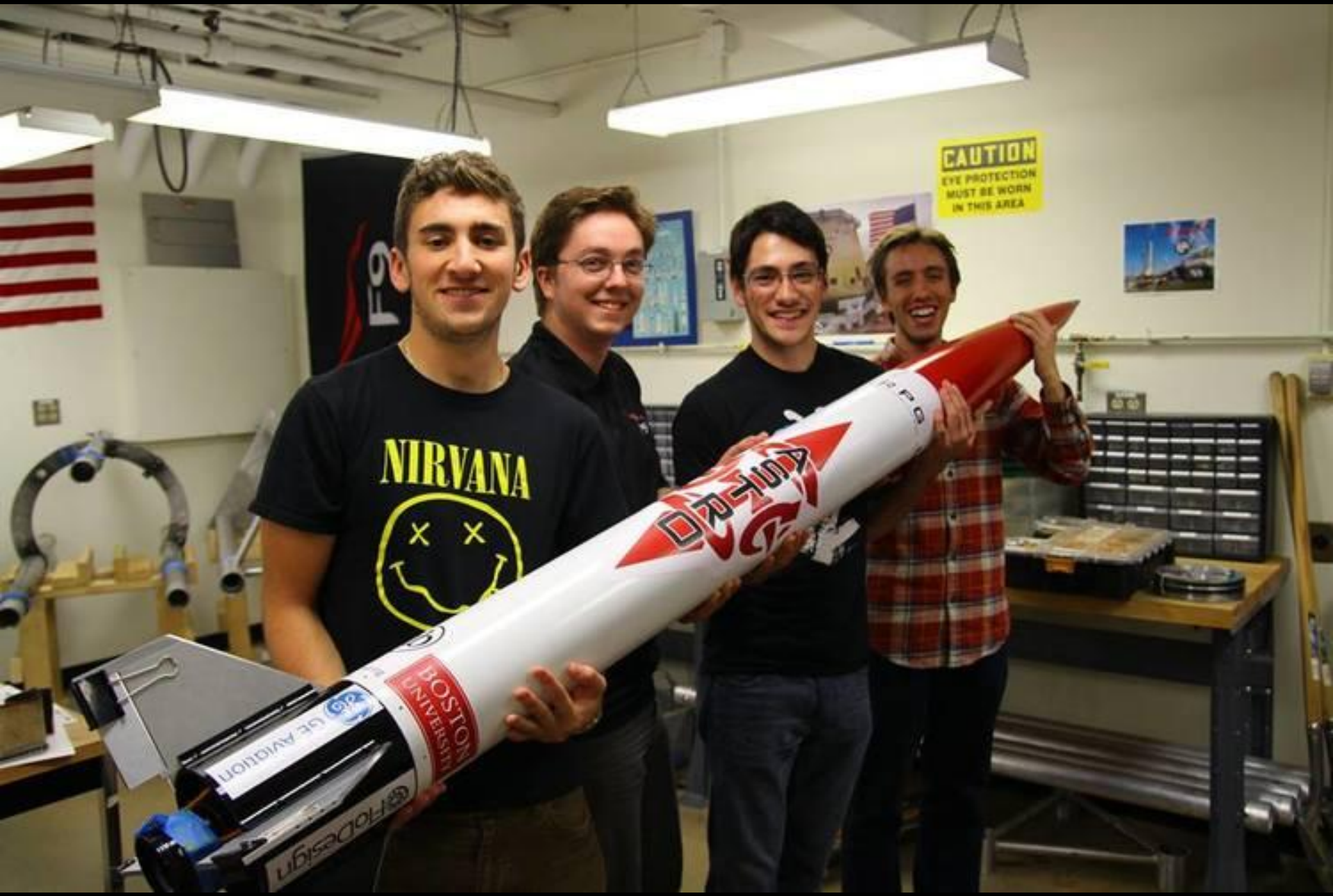
Summer 2015 - present

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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BOSTON
UNIVERSITY
GE AVIATION
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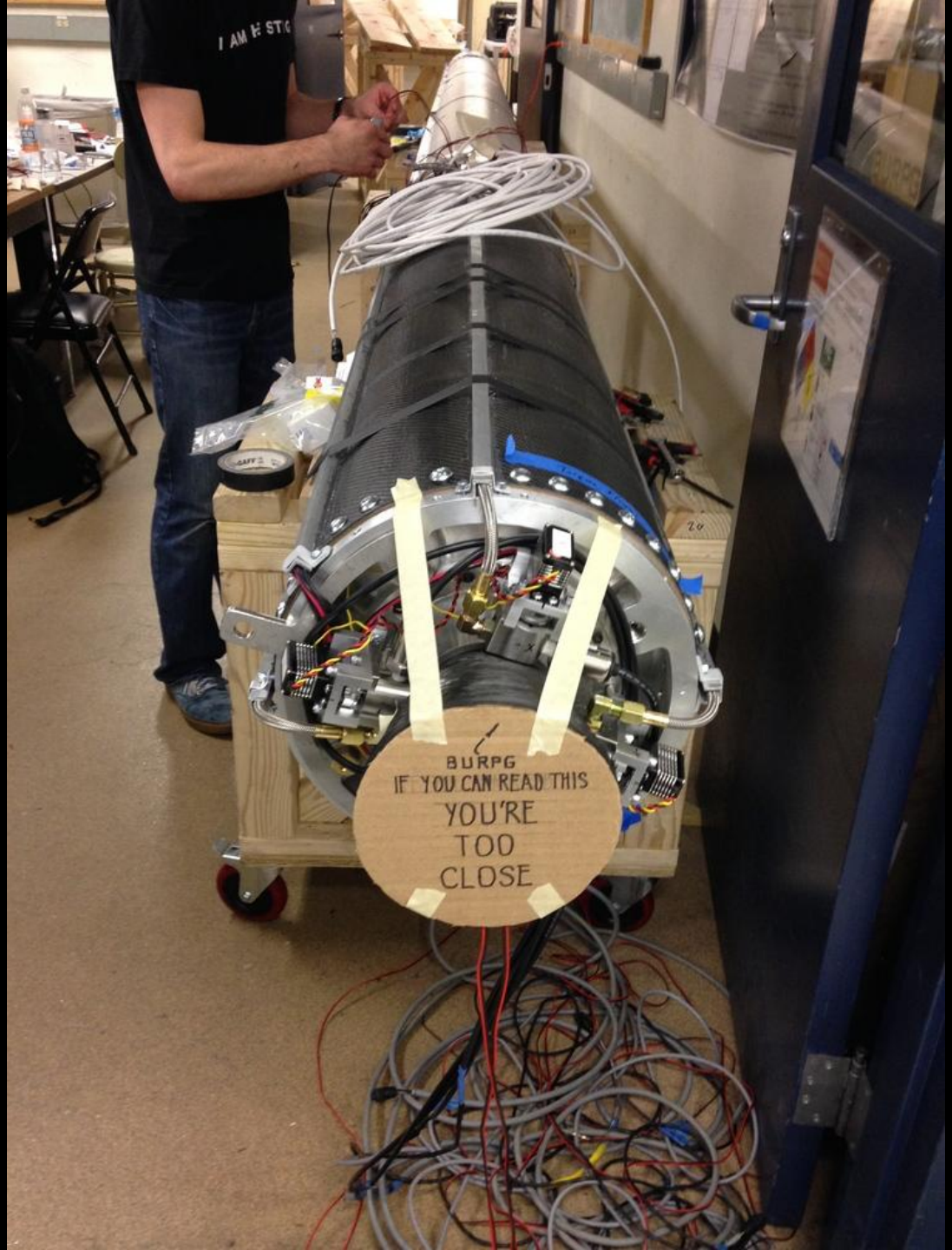
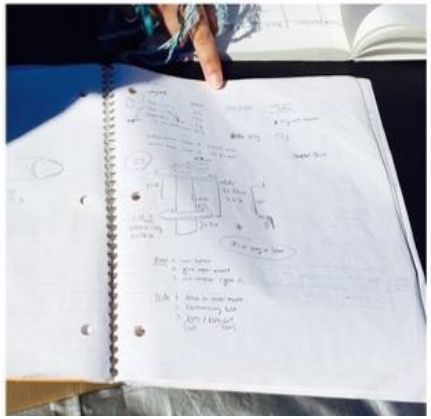

BURPG
IF YOU CAN READ THIS
YOU'RE
TOO
CLOSE

32 2016 SUMMER FELLOWSHIPS AT:

WELLESLEY COLLEGE	1
FIVE COLLEGE ASTRONOMY DEPARTMENT	3
OLIN COLLEGE	4
UMASS/AMHERST	4
WPI (1 AT NASA CENTER)	3
UMASS/DARTMOUTH	2
BRIDGWATER STATE	2
MARIA MITCHELL OBSERVATORY	2
UMASS/LOWELL	2
MIT	4
BOSTON UNIVERSITY	2
MOUNT HOLYOKE	1
TUFTS UNIVERSITY	2

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

Welding Lab

CAPE COD
COMMUNITY
COLLEGE
Powerful Futures Start Here
WASTE

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**".

RIBBON-CUTTING JUNE 2016

Inaugural Class Orientation September 19

(Full class with a wait list)

SOCIAL MEDIA

@ 4CsAviation

CAPE COD COMMUNITY COLLEGE

owerful Futures Start Her

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

http://www.boeing.com/commercial/market/long-term-market/pilot-and-technician-outlook/

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".