

STUDENT GOVERNMENT BUDGET COMMITTEE  
SEMESTER ALLOCATION REQUEST FORM

Requested: \$ 4,906.63

Allocated: \$ 3,457.53

Approved: yes or no

Organization requesting funds: ASME Club

Contact person name: Kale Odhner

PSU Email: kjo5080@psu.edu

Phone: 610-802-5496

Club Advisor name: Rungun Nathan

PSU Email: rungun.nathan@psu.edu

Phone: 610-396-6170

*Emailed allocation on 11/9/2017*

Date budget submitted: 10/30/17

X *Kale Odhner*

Club President Signed Name

X *Rungun Nathan*

Advisor Signed Name

**STEPS FOR BUDGET REQUEST**

1. On the next page, copy and paste a table for each program your club is hosting or attending. An itemization table for each of the items needed is under the program table. Please add additional rows to the item table for events requiring multiple items. Note\*\* gas is calculated at 55 cents per mile.
2. Explain the nature of the program/activity? How will students and/or the campus as a whole benefit by the funding of this proposal? How will the program/activity be advertised to all students? Who is the targeted audience? Please be as specific as possible.
3. Provide an invoice whenever possible in order to justify costs. For example, if your club needs a bus, provide an invoice from the bus company to support the request.

*Talked with Kale on Nov. 2, 2017 about the importance of these events on campus. This is the bridge between learning and actually applying the material.*

**RECEIVED**

OCT 30 2017

1:42 pm JH

**STUDENT GOVERNMENT BUDGET COMMITTEE  
SEMESTER ALLOCATION REQUEST FORM**

**Please add more tables or rows as needed.**

<b>Program Name:</b>		<b>Program Description:</b>
<b>Program Location:</b>		
<b>Anticipated Number Of Attendees:</b>		
<b>Total Funds Requested For Program:</b>		
<b>Is This Program Open To The Campus?</b>		
<b>Amount Of Funding From Other Sources:</b>		

Please list the materials, prices, and item location for the requested event amount below:

Item Name	Unit Price	Quantity	Item Total	Location

<b>Program Name:</b>		<b>Program Description:</b>
<b>Program Location:</b>		
<b>Anticipated Number Of Attendees:</b>		
<b>Total Funds Requested For Program:</b>		
<b>Is This Program Open To The Campus?</b>		
<b>Amount Of Funding From Other Sources:</b>		

Please list the materials, prices, and item location for the requested event amount below:

Item Name	Unit Price	Quantity	Item Total	Location



# STUDENT GOVERNMENT BUDGET COMMITTEE SPRING SEMESTER ALLOCATION REQUEST FORM

**Rocket Program (HASR)**      **Program Description:** High Altitude Sugar Rocket (HASR) is project that is building rockets to break the nation sugar rocket record. The objective is to design and build a sugar powered rocket with a parachute recovery system that will achieve 45,000 feet AGL (above ground level) by May 2018. Every peice of the rocket will be engineered and built by students of Penn State Berks.

**Program Name:**

**Program Location:**

**Anticipated Number of Attendees:**

**Total Funds Requested For Program:**

**Is This Program Open to the Campus:**

yes

none

**Amount of Funding From Other sources:**

\$1,184.79

**Itemized list**

Item	Supplier	Description	Quantity	Unit Price	Price
✓ Blue paint	NCS	#1E407C or RGB: (30, 64, 124)	1	\$30.00	\$30.00
✓ White paint	NCS	#FFFFFF or RGB: (255, 255, 255)	1	\$30.00	\$30.00
✓ birch plywood sheet	Lowes	6" x .200 x 48" (pack of 4)	1	\$73.40	\$73.40
✓ cardboard liner	Yazoo Mills	271-B	1	\$60.45	\$60.45
✓ 10 oz Fabric 50 Wide 5 Yard Package	Fibre Glasi	582-C	1	\$59.95	\$59.95
✓ Nylon release ply 60 Wide 5 yard package	Fibre Glasi	2060-A	1	\$21.95	\$21.95
✓ 60 Minute Epoxy Cure 1/2 Pint	Fibre Glasi	2060-B	1	\$44.95	\$44.95
✓ 60 Minute Epoxy Cure quart	Fibre Glasi	2000-B	1	\$104.95	\$104.95
✓ System 2000 Epoxy resin gallon	Fruity Chutes	IFC-120	1	\$402.00	\$402.00
✓ Iris Ultra 120" 79lb (white & blue)	Fruity Chutes	CDB-55	1	\$48.00	\$48.00
✓ 5.5" & 6" x 13" Deployment Bag	Fruity Chutes	SWIV-3000	2	\$9.00	\$18.00
✓ 3000lb Stainless Steel Swivel	Fruity Chutes	SCN-688	1	\$24.80	\$24.80
✓ 7yrd 9/16 2400lb shock cord	Lowes	22249	2	\$0.95	\$1.90
✓ 2.5"x0.75"x0.25" U-Bolt	Fruity Chutes	CFC-15	1	\$50.00	\$50.00
✓ 15" Elliptical Parachute	Gun Dog Supply	3050	1	\$14.99	14.99
✓ 12 Ga. 2 3/4 blank shotgun shells	mcmaster	44666K545	1	\$15.35	15.35
✓ 1ft. 3/4 in threaded aluminum pipe	Pyro Chem Source	Halfia	20	\$3.00	<del>\$60.00</del>
✓ KNO3 Oxidizer	M.B Glick	aluminum 160		\$1.00	\$160.00
✓ motor casing metal	fibre glasi	2393-C	1	\$49.95	\$49.95
✓ 24K carbon tow 250 yard roll	Eggtimer Rocketry	Quantum	1	\$43.00	\$43.00
✓ Eggtimer Quantum Kit	Eggtimer Rocketry	Quantum data cable	1	\$5.00	\$5.00
✓ Data cable	Eggtimer Rocketry		1	\$120.00	\$120.00
✓ Eggtimer LCD starter set	National Instruments	782604-01	1	\$204.00	\$204.00
✓ USB-6001	Adafruit	L3GD20H	1	\$16.54	\$16.54
✓ 10DOF IMU	Arduino	A000066	1	\$25.95	\$25.95
✓ Arduino Uno R3 Microcontroller					

Slash  
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\$60.00

V

\$599.10

Zippy Compact 2200mAh 3s 25C  
Zippy Compact 2200mAh 2s 25C

Hobbyking  
Hobbyking

ZC.2200.3S.25 2 \$11.94 \$23.88  
ZC.2200.2S.25 2 \$10.94 \$21.88

Total: \$1,783.89

\$1,184.79

**Program Location:** Solar Sky, Drexel Exhibition  
Penn State Berks  
**Anticipated Number of Attendees:** 10  
**Total Funds Requested For Program:** \$768.14  
**Is This Program Open to the Campus:** yes

**Amount of Funding From Other sources:** none

**Itemized list**

Item	Supplier	Description	Unit Price	Quantity	Price
PLA Filament	Amazon	Hatchbox 1.75mm white PLA	\$26.97	3	\$80.91
PLA Filament	Amazon	Hatchbox 1.75mm blue PLA	\$29.21	2	\$58.42
PLA Filament	Amazon	3D Solutech 1.75mm clear PLA	\$17.99	2	\$35.98
LiPo battery	Hobbyking	Turnigy 3000mAh 4s 40C	\$33.36	3	\$100.08
Foam board	Dollar Tree	25 pack Dollar Tree Readi-board	\$25.00	4	\$100.00
Carbon tube	Amazon	ARRIS 10mm x 12mm x 500mm	\$18.99	1	\$18.99
Receiver	Amazon	FrSky X8R	\$35.97	1	\$35.97
Electronic Switch	Hobbyking	Turnigy Receiver controlled switch	\$7.39	2	\$14.78
Pitot Tube	Hobbyking	Pixhawk Digital Airspeed Sensor	\$51.80	1	\$51.80
Solar cells	Aliexpress	10x Sunpower Maxeon C60 Solar Cx	\$29.90	5	\$149.50
OSD	Banggood	Micro Minim OSD w/KV mod	\$8.99	1	\$8.99
Video Transmitter	Hobbyking	Skyzone TS5823 5.8GHz	\$18.55	1	\$18.55
Voltage regulator	Banggood	Matek 4S lipo to 12v linear volate reg	\$1.99	1	\$1.99
Camera	ebay	480TVL CCD FPV camera	\$30.68	1	\$30.68
Propeller	Aiofthobbies	Aeronaut Cam Folding 11"x7" prop	\$12.20	2	\$24.40
Motor	Hobbyking	Multistar 3525 650KV	\$27.50	1	\$27.50
Servo wire	Amazon	10x 320mm servo extension wire	\$4.80	2	\$9.60

\$768.14

**Program Location:** Engine Vibration Control  
Penn State Berks  
**Anticipated Number of Attendees:** 10  
**Total Funds Requested For Program:** \$676.04  
**Is This Program Open to the Campus:** yes

**Amount of Funding From Other sources:** none

**Program Description:** The Solar Flying Wing, named Solar Sky, is planned to be the first flying wing design without vertical tails to be partially solar powered. The craft will take into account current solar aircraft design considerations, but in a new form.  
Our goal is to offer students practical experience through a flying wing drone project. Building a plane requires design from different subjects, including robotics, aerodynamics, electrical, and computer science. Plane also have real world applications including navigation, communication, and flight.

**Program Description:** The Engine Vibration Control Project allows students to gain practical engineering experience through the construction and design of engine vibration controller (Attenuator). This research is focused on balancing the internal forces created from internal combustion and reciprocating motion. The engine variances will be determined through external measurements and then compared to theoretical models. Research will be done to determine several possible solutions to produce the ideal counterbalancing technique. The research is based heavily upon the balancing of a single cylinder internal combustion engine by analyzing counter-weights.

**Itemized list**

Item	Supplier	Description	Quantity	Unit Price	Price
Accelerometer +-200g	Amazon	ADXL377	3	\$24.95	\$74.85
Accelerometer +-16g	Adafruit	ADXL326	3	\$17.95	\$53.85
Arduino Uno Development Board	Amazon	ATmega328P CH340	3	\$7.99	\$23.97
Vibration Measurement Steel	M.B.Glick	Steel	100	\$1.00	\$100.00
Vibration Measurement Hardware	Paul B Zimmerman's	Nuts and Bolts	25	\$1.00	\$25.00
Stens Engine Overhaul Kit	Jacks Small Engines	785576	1	\$115.01	\$115.01
(2)Briggs Stratton Spark Plug	Amazon	796112	1	\$6.99	\$6.99
Sae 30w Oil	Amazon	100005	1	\$3.67	\$3.67
Dynamic Balancer Steel	M.B.Glick	Steel	100	\$1.00	\$100.00
(2)Pillow Block Bearing	Amazon	UCP205-16	1	\$16.98	\$16.98
1/3 hp AC Motor	Ebay	SE3585-115V-1075	1	\$69.00	\$69.00
Dial Indicator	Amazon	Dial Indicator	1	\$25.99	\$25.99
Incremental Encoder	HoneyWell	640ES103A06NAAY	1	\$16.83	\$16.83
Gas	Sheetz	Unleaded Fuel	5	\$2.79	\$13.95
Oxo Good Food Scale	Amazon	1157100	1	\$29.95	\$29.95
		Total			\$676.04

**Program Name:**

**Program Location:**

**Anticipated Number of Attendees:**

**Total Funds Requested For Program:**

**Is This Program Open to the Campus:**

yes

none

**Amount of Funding From Other sources:**

Turbine Generator

Penn State Berks

**Program Description:** This project is to build a turboshaft jet engine that will be used to power a generator. The approach is find alternative ways to create range extending vehicals using more efficient ways of generating electric power. Jet engines can run up to 65% efficiency vs. conventional piston engines at 30%.

\$125.00

**Itemized list**

Item	Supplier	Description	Quantity	Unit Price	Price
used deisel turbocharger	Joos Used Auto Part	HX40 turbo	1	\$30.00	\$30.00
Turbo bearing rebuild kit	Amazon	HX40 turbo rebuild kit	1	\$55.00	\$55.00
stainless steel pipe	M.B.Glick	Combustion camber	1	\$10.00	\$10.00
braided stainless steel	M.B.Glick	fuel system fitting	1	\$10.00	\$10.00
1/4 pipe fittings	M.B.Glick	fuel system fitting	1	\$10.00	\$10.00
propane regulator	M.B.Glick	fuel regulator	1	\$10.00	\$10.00

Total: \$125.00

**Program Name:** Level 1 Certification project  
**Program Location:** Penn State Berks  
**Program Description:** A team of engineers are building three Level 1 High power rockets for the National Association of Rocketry (NAR) Certification. The project requires the engineering team to mathematically design, build and

fly 3 separate rockets.

\$703.56

Anticipated Number of Attendees:  
 Total Funds Requested For Program:  
 Is This Program Open to the Campus:

Amount of Funding From Other sources:

**Itemized list**

Item	Supplier	Description	Quantity	Unit Price	Price
Rising Star Fins (set of 3)	Apogee		3	\$7.85	\$23.55
MOTOR MOUNT KIT 38MM/54MM	Apogee		3	\$7.50	\$22.50
36" Nylon Parachute	Apogee		3	\$16.99	\$50.97
PNC-2.14" 54mm (Nose cone)	Apogee		3	\$14.80	\$44.40
2.56in LOC Body Tube	Apogee		6	\$6.88	\$41.28
Ball bearing swivel	Apogee		3	\$4.20	\$12.60
1/2" Diameter Heavy-Duty Elastic Shock Corr.	Apogee		30	\$0.38	\$11.40
Aero Pack 38mm Retainer- L	Apogee		3	\$26.75	\$80.25
56mm Ejection Charge baffle	Apogee		3	\$6.29	\$18.87
G5000 Rocketpoxy 2-Quart Package	Apogee		1	\$65.00	\$65.00
Aerotech RMS-38/720 casing	Apogee		1	\$74.90	\$74.90
Aerotech 38mm Reload Adapter system	Apogee		1	\$48.15	\$48.15
38 mm forward open closure	Apogee		1	\$40.66	\$40.66
38mm Aft closure	Apogee		1	\$40.66	\$40.66
H112J-14 aerotech motor reload	Apogee		3	\$42.79	\$128.37

total: \$703.56

**Program Name:** Smithsonian Air Space Museum Trip  
**Program Location:** Penn State Berks  
**Program Description:** ASME is collaborating with the SWE club (Society of Women Engineers) to go on a trip down to the Smithsonian Air and Space Museum in Chantilly, VA.

\$850.00

Anticipated Number of Attendees:  
 Total Funds Requested For Program:  
 Is This Program Open to the Campus:

Amount of Funding From Other sources:

\$0.00 No documentation or invoice for bus on either Club budget

Itemized list

Item	Supplier	Description	Quantity	Unit Price	Price
Beiber Bus charter	Beiber Bus	Round trip bus charter from Berks campus to museum	1	\$1,700.00	\$1,700.00
		split between SWE and ASME	Total		<del>\$880.00</del>

Grand Total: ~~\$4,906.63~~

cutting \$599.10 →  
from (HASK)  
\$457.53

~~\$880.00~~

