The Final Round[1]

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State Finals

Amity High School

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Resolved: U.S. federal budget funding for NASA (National Aeronautics & Space Administration) should be substantially decreased.

A Note about the Notes

I've reproduced my flow chart for the final round at Amity High School augmented by what I remember from the debate. The notes are limited by how quickly I could write and how well I heard what was said. Others may have slightly different versions. I'm sure the debaters will read them and exclaim, at points, "That's not what I said!" I apologize for any errors, but I hope debaters will appreciate this insight: what a judge hears may not be what they say or wish they had said.

There are two versions of the notes. The one below is chronological, reproducing each speech in the order in which the arguments were made. It shows how the debate was actually presented. The second is formatted to look more like my written flow chart, with each contention "flowed" across the page as the teams argued back and forth. It's close to the way I actually take notes during the debate.

The Final Round

The final round at Amity was between Joel Barlow (Alyssa Bilinski and Jason Kaplan) on the Affirmative and Glastonbury (Scott Garroshen and Priyanka Saxena) on the Negative. The debate was won by the Affirmative team from Joel Barlow.

1) **First Affirmative Constructive**
   a) Introductory quote from Neil Armstrong, "One small step for a man, one giant step for mankind."
      i) Affirmative says "Look at the costs before we leap"
   b) Statement of the Resolution
   c) Definition: "substantially decrease" means to hold hearings to select pure science programs with no immediate benefit to be reduced or cancelled.
      i) For example, we would suspend the Kepler satellite
      ii) Programs will be prioritized and scaled back

d) A1[2]: The US is in the middle of a spending crisis
   i) The national debt is $9 trillion
   ii) Papers are full of news of the stock market crash, Fed meetings to deal with crisis
   iii) We must prioritize spending
      (1) Pure science is not an immediate priority
e) A2: NASA must focus on needed projects, with no extraneous spending
   i) Exploring the universe is nice, but brings no immediate benefit
   ii) Enhanced manufacturing in zero gravity on the ISS (International Space Station) may help medical research
   iii) Polar satellite project may help solve global warming
   iv) Projects must provide useful information, not trivia.
f) A3: Problems on earth are more important than pure research
   i) We need additional funding for educational programs
      (1) No Child Left Behind is an unfunded mandate
      (2) For example, reading levels in Mississippi are very low
   ii) Why take the funds from NASA
      (1) $1, $5, $10 or $20 billion will make an enormous difference to education
      (2) NASA programs we will cut provide no immediate benefits
   iii) Education is only one example, many other programs could also benefit
      (1) Health care, body armor for our troops in Iraq, deficit and debt reduction
g) The US must pinch pennies. Leap ahead, but look before we leap.

2) Cross-Ex of First Affirmative

a) How much of NASA's budget will be cut? We don't have an exact number, but a lot of programs will be cut like Hubble, Keppler, Constellation.
b) Isn't a long-term solution better than a short-term one? Depends on the comparison. Not if we are talking about children in emergency rooms.
c) Isn't it true that by law hospitals must serve everyone who comes to an emergency room? Emergency rooms don't provide good preventive care
d) What does the stock market crash have to do with NASA? It's just one example showing that we are in an economic crisis.
e) Haven't there been times that were worse? I'm not an economic expert
f) Wasn't it worse after 9/11? Depends on how you measure it.
g) Hasn't the $9 trillion debt been climbing since then? You'd have to give me a measure.
h) Isn't it due largely to Iraq? Iraq is a whole 'nother debate.
i) Won't cutting NASA cause a loss of jobs? It would only be a small number of jobs versus educating millions of children

3) First Negative Constructive

a) Introduction
b) Resolution
c) The Negative accepts the Affirmative definition.
d) N1: Decreasing NASA's budget means abandoning projects
   i) The Affirmative basically agrees with this, advocating selective cancellation
   ii) These programs are the entirety of NASA

[2] "A1" indicates the Affirmative first contention, "N2" the Negative second contention and so forth.

(1) How can you improve education if you don't have things to teach?
(2) Recent experience with the Mars Rover program shows small cuts lead to complete shutdown
(3) Projects like the Mars Rover provide important information for future colonies and climate studies
(4) The future seems far off, but really isn't

iii) With the space shuttle being retired we will be without manned launch capability for four years
(1) NASA is already facing a budget crisis
(2) Aff. cuts likely to lead to halt on manned spaceflight
(3) Manned space flight is needed for zero-gravity research

e) N2: NASA has fielded unprecedented scientific discoveries
i) We would lose the direct benefits from research that would be cut
(1) Examples include titanium alloys, Kevlar used in police vests and soldiers' body armor

ii) We would also lose jobs if programs are cut
(1) If there is an economic slowdown, we can't afford more job losses
(2) For example, Pratt & Whitney would be affected.

f) N3: NASA is a vital component of national defense
i) Satellites are expensive, and you can't cut just a little bit to fill prescriptions
ii) There are other programs that could be cut to provide the Aff. benefits
iii) International competition needs to be met
(1) Russia has launched 3000 flights to our 1400
(2) These cuts would permit other countries to take over the lead in space

4) Cross-Ex of First Negative

a) Kevlar and the other developments were spinoffs, right? Yes
b) Couldn't they have been developed directly? Can you give me an example?
c) What benefit is there from showing a nebula looks like a horse head? The point isn't one picture
d) Wasn't that a NASA program? The Hubble telescope wasn't launched to view one nebula. Advances often come from abstract activity
e) Is the Affirmative plan to cut all programs? You didn't specify which ones.
f) So we could kept the cancer research projects? You need the space shuttle to do zero-gravity research
g) Isn't the shuttle being retired? You need to spend to build its replacement
h) Will you acknowledge that the advances we've used on earth have come from space activity within the solar system? Yes
i) So we could cut Kepler with no loss? Kepler is underfunded
j) Can we send a spacecraft to these earth-like planets? I don't see the relevance of the question
k) Does Hubble exploration benefit us immediately? Cutting it would lose use of the telescope.

5) Second Affirmative Constructive

a) I saw a wonderful Discovery Channel program on planetary discovery
i) Explained how astronomers measured the wobble in the star
ii) But it isn't clear this is important compared to CNN showing riots in Kosovo

b) NASA's activities can be separated into those with an immediate payback and pure science
    i) The benefits of Kepler are very obscure
    ii) Exploring the moon or Mars would meet the Aff. guidelines
c) N2: The Aff. definition says that we will cut programs with no tangible benefit
    i) Therefore discovery within the solar system is okay
        (1) We can travel to these planet in the future
    ii) Security satellites are okay, though these are mostly part of defense, not NASA
        (1) A2: NASA must be made to focus on programs \that would have an influence on the next few thousand years
d) A3: This would permit us to spend a few hundred million on education
    i) This wouldn't limit science education
        (1) They don't teach K-12 based on these pure research programs
        (2) Universities could attract private funding for science research
e) N2 and N3 are largely negated by the Aff. definition
    i) We wouldn't be cutting the practical programs
    ii) It isn't wise to increase funding at this time.

6) Cross-Ex of Second Affirmative

a) Is energy from dark matter and quasars useful? Yes, and these were discovered by NASA
b) Don't we need to send deep space probes? Dark matter is everywhere
c) Can you give an example of how we have benefited from something outside of the solar system? The nearest black hole is 20 million light years away
d) Black holes aren't really taught in high school, are they? Not really.
e) Isn't high school science is much more advanced than 50 years ago? Yes
f) Science tends to advance, tends to become more esoteric? Yes
g) So this might be taught in high school at some point? Only in a limited way
h) The Aff. is going to cut all pure science programs? Yes
i) Name some programs that don't have a pure science component?
j) Name some pure science programs? Cosmology

7) Second Negative Constructive

a) N1: The Aff agrees with this contention, stating they will cancel programs
b) N2: The Aff. talks about immediate benefits
    i) Kevlar benefits the police and military
c) N3: We have to recognize that war has changed
    i) We have cyber war, technology war
    ii) NASA's knowledge on these is vital
    iii) Every celestial body affects every other
        (1) We need to know about radiation, planetary formation
        (2) This can lead to things like better energy use
d) A1: One solution to the deficit is better knowledge
    i) Without the space shuttle and other programs we'll have slower development
    ii) This means fewer new products like Kevlar
    iii) The risk of a meteor strike means we have to go into space to protect ourselves

e) A3: Education is important
   i) It makes for a better workforce and stronger economy
   ii) But we need space research to achieve this
      (1) We can't do zero-gravity research on earth
   iii) Knowledge from the space program is its greatest benefit
      (1) Anti-bacterials, vaccines,
      (2) Tang with concentrated vitamin C helps prevent scurvy
   iv) NASA is not superfluous as its programs provide long term benefits

8) Cross-Ex of Second Negative

a) All the benefits you cite are tangible, right? Yes
b) So aren't they covered by our definition? You've never explained where they come from
c) Didn't we say all projects within the solar system would continue? Yes
d) Is the US educational system the best in the world? Highly rated, if not the best.
e) What about the standardized test results? You have to look at the standards, which vary by state and country
f) Doesn't the UN rate the US 17th? I don't know.
g) There is no other way to test a hard impact? Of course, but not the impact of a meteorite.
h) Do you believe we should spend more on education for quasars or AP calculus? There are other intangible benefits from NASA that may help.
i) Weren't Tang, Kevlar and GPS all developed for missions within the solar system? Yes
j) Haven't we said we'd maintain projects within the solar system? Yes
k) How does NASA help us cope with the deficit? More information and knowledge.

9) First Affirmative Rebuttal

a) We can better understand the issues by considering three questions
b) Is NASA funding programs that the government should do?
   i) This is the clash between A1 and N1
   ii) We need to question the purpose of gov't when funds are strained
   iii) Aff. will not cut vital programs with tangible benefits
   iv) The situation requires prioritizing spending, so we should cut pure science
c) Can we focus NASA on useful programs?
   i) This is the clash between A2 and N2
   ii) Mars exploration and the International Space Station won't be cut
   iii) We don't need to do research on quasars 20 million light years away
   iv) Spinoffs like GPS, Kevlar and MRI are from in programs that will be cut and could be developed on earth
d) What is the best way to spend tax dollars?
   i) This is the clash between A3 and N3.
   ii) The government is not a university
      (1) We may lose the space race a little
      (2) We are losing the education race
      (3) If we aren't up to par on math and science we can't staff NASA, the military or other high-tech jobs
   iii) Clearly we can better use the funds

10) First Negative Rebuttal

a) Intro
b) Resolution
c) There is an analogy here to music and art education
    i) If there is a deficit, these are the first cut, with the claim there is no tangible benefit
    ii) Experience shows this is exactly wrong
    iii) Pure science is the same. We need to do basic research to advance
d) A1: We agree there are economic problems
    i) But we have to be at the forefront of technology and science
    ii) We can't compete internationally without this
        (1) Cut NASA and the impact will be felt at Pratt & Whitney
e) A2: NASA is focused
    i) The Aff says the Mars rover project is okay
    ii) The Aff says space exploration is okay
    iii) We need to keep moving outward as we exhaust resources
    iv) Tangible benefits flow from pure science
f) A3: Education can be improved without throwing money at it
    i) There is always the question of what to teach
    ii) Pure research answers that questions
g) N1: There is a direction connection from pure research to technological advances to new businesses
h) N2: The energy crisis is not going to be solved by ethanol but by anti-matter

11) Second Negative Rebuttal

a) In the US we are addicted to instant gratification. We need to change this.
b) The Aff. says space exploration isn't useful.
    i) This was also said at times about genetics and vaccines
    ii) Kepler and other programs that look out are useful
        (1) We can't mine asteroids in the solar system due to the risk, so we have to go further out
c) Ethanol costs more than oil
    i) We need other long term resources such as those NASA is looking for
d) We have to provide for our own national defense
    i) Need to look outside the solar system
e) Short-term educational relief is fine
    i) But we need knowledge to teach
    ii) We need knowledge to develop new technology
    iii) Space presents a challenge that drives development
        (1) Micrometeorite risks lead to Kevlar
    iv) If we cut space programs, we'll harm real businesses on earth
        (1) Pratt & Whitney affects Connecticut, Cape Kennedy affect Florida
    v) Aff. advocates short-term-ism
        (1) Knowledge is priceless

12) Second Affirmative Rebuttal

a) The Neg. has used straw men to misconstrue the Aff. argument
b) The issue is pure science versus hard science

i) Hard science is necessary; pure science can be cut if no benefit in the next million years

c) Is NASA's exploration of space useful?
   i) Aff. favors useful programs, while Neg. says Aff. does not
   ii) Money can be spent more effectively by diverting funds from pure science to hard science
   iii) This includes technology projects and Mars exploration

d) Does research into cosmology outweigh other benefits?
   i) Pure research should be the business of private universities
   ii) Pure research should not be funded by the government
   iii) Basic math is more important than string theory and quasars.