

Table of Contents

ASTEROID MINING NEGATIVE 5

HARMS: US HAS SUFFICIENT RARE EARTH ELEMENTS 5
 HARMS: RARE EARTH ELEMENTS ARE WIDELY AVAILABLE 6
 HARMS: JAPANESE DISCOVERY OF RARE EARTH ELEMENTS 8
 SOLVENCY: CAN'T MINE ASTEROIDS 11
 SOLVENCY: HEALTH RISKS 14
 SOLVENCY: LEGAL/TREATY PROBLEMS 15
 SOLVENCY: MICROBE REINTRODUCTION 17
 SOLVENCY: US POLICY IS THE PROBLEM FOR RARE EARTH 18
 SOLVENCY: NO SINGLE POLICY SOLVES 19

CONSTELLATION NEGATIVE 20

HARMS: CONSTELLATION NOT CRITICAL TO US LEADERSHIP 20
 HARMS: OBAMA PLAN EFFECTIVE 21
 HARMS: VAGUENESS OF OBAMA PLAN NOT A PROBLEM 22
 SOLVENCY: CONSTELLATION HURTS OTHER PROGRAMS 23
 SOLVENCY: CONSTELLATION WAS OVER BUDGET/EXPENSIVE 24
 SOLVENCY: CONSTELLATION TOO NARROWLY FOCUSED/DIRECTED 25
 SOLVENCY: CONSTELLATION HURT INTERNATIONAL/PRIVATE COORDINATION 27
 SOLVENCY: CONSTELLATION WOULD NOT WORK 28
 SOLVENCY: CONSTELLATION HAD NO INNOVATION 31
 SOLVENCY: CONSTELLATION WILL NOT CAUSE US LEADERSHIP 33

LUNAR BASES/COLONIZATION NEGATIVE 35

SOLVENCY: THERE IS NO REASON TO DO IT 35
 SOLVENCY: TOO DANGEROUS/DIFFICULT TO DO IT 38

LUNAR HELIUM-3 MINING NEGATIVE 40

HARMS: THERE ARE ALTERNATIVES TO HE-3 40
 SOLVENCY: LUNAR HELIUM-3 PLAN IS ENTIRELY INFEASIBLE 41
 SOLVENCY: TECHNOLOGY DOESN'T WORK 42
 SOLVENCY: FUSION CANNOT WORK 44
 SOLVENCY: ITER FUSION CANNOT WORK 47
 SOLVENCY: NEW TECHNOLOGY/FUEL CANNOT AVERT ECOLOGICAL CRISIS 48
 SOLVENCY: CANNOT PERMIT EXPLOITATION OF THE MOON 49
 SOLVENCY: SPACE EXPLORATION WILL NOT SAVE HUMANITY 50
 SOLVENCY: MOON TREATY COMPLICATES SOLVENCY 51

MARS NEGATIVE 52

INHERENCY: PRIVATES WILL GO TO MARS 52
 INHERENCY: INCREMENTAL APPROACH IS BEST 53
 INHERENCY: ROBOTIC MISSIONS ENOUGH FOR MARS 54
 INHERENCY: OBAMA/NASA COMMITTED TO MARS BY 2030 57
 MARS PRIVATE COUNTERPLAN: MARS DIRECT WOULD BE CHEAPER IN PRIVATE HANDS 60
 SOLVENCY: MARS IS TOO COMPLEX OF A MISSION/TOO MANY TECHNICAL CHALLENGES 61
 SOLVENCY: SPECIFIC TECHNICAL BARRIERS PREVENT A MARS MISSION 66
 SOLVENCY: HUMAN SAFETY AND PSYCHOLOGY FACTORS ARE KEY 68
 SOLVENCY: SHOULD FOCUS ON BROAD THEMES AND NOT DESTINATIONS 78
 TURN: NASA AS AGENCY OF ACTION DRIVES UP COSTS 79
 TURN: MARS EXPLORATION WILL CONTAMINATE THE PLANET DESTROYING SCIENTIFIC ADVANTAGE 80

MISSILE DEFENSE NEGATIVE..... 83

SOLVENCY: MISSILE DEFENSE DOESN'T WORK 83

SOLVENCY: MISSILE DEFENSE DOES NOT DETER 87

SOLVENCY: MISSILE DEFENSE ENCOURAGES PROLIFERATION..... 88

SOLVENCY: MISSILE DEFENSE UNDERMINES RELATIONS..... 91

SOLVENCY: MISSILE DEFENSE CANNOT STOP NORTH KOREA/IRAN..... 92

SOLVENCY: SPACE BASED MISSILE DEFENSE FAILS..... 93

SOLVENCY: SOLID BOOST INTERCEPTORS..... 95

SOLVENCY: SPACE-BASED LASERS..... 99

SOLVENCY: NO QUALITY CONTROL FOR MISSILE DEFENSE PROGRAMS 100

NUCLEAR PROPULSION NEGATIVE..... 104

INHERENCY: ALREADY HAPPENING..... 104

HARMS: NUCLEAR PROPULSION IS NOT NECESSARY 105

SOLVENCY: WEAPONIZATION 107

SOLVENCY: DANGEROUS 108

PLANETARY DEFENSE NEGATIVE..... 112

HARMS: CURRENT PROGRAMS ARE DETECTING DANGEROUS BODIES 112

DEPARTMENT OF DEFENSE COUNTERPLAN 114

SOLVENCY: NO TECH TO STOP IMPACT 116

SOLVENCY: WARNING SYSTEM A BETTER INVESTMENT 117

SOLVENCY: FOCUS ON LARGE OBJECTS BETTER..... 117

SOLVENCY: GROUND-BASED BETTER..... 118

SOLVENCY: NUCLEAR DEFENSE 119

SOLVENCY: INTERNATIONAL COMMUNITY WILL NOT AGREE 121

SETI/METI NEGATIVE 124

SOLVENCY: NO ONE THERE 124

SOLVENCY: NO ONE WILL RESPOND 128

SOLVENCY: THE PROGRAM DOESN'T WORK..... 130

SOLVENCY: TIMEFRAME FOR RESPONSE 133

SOLVENCY: METI IS DANGEROUS..... 134

SOLVENCY: ACTIVE SETI IS DANGEROUS 136

SOLVENCY: WE NEED TO BROADCAST (METI/ACTIVE SETI) 138

SOLVENCY: ALIEN HACKERS 139

SOLVENCY: ALIENS WILL HARM US 140

SPACE BASED SOLAR POWER NEGATIVE..... 143

INHERENCY: PRIVATE COMPANIES ALREADY DEVELOPING SBSP..... 143

SOLVENCY: SBSP IS NOT FEASIBLE..... 144

SOLVENCY: LAUNCHES ARE TOO EXPENSIVE 149

SOLVENCY: COST IS TOO HIGH 151

SOLVENCY: SAFETY 153

SOLVENCY: SHOULD BE INTERNATIONAL..... 154

SOLVENCY: NSSO REPORT HAS NO CREDIBILITY..... 155

SOLVENCY: LUNAR SBSP WILL NOT WORK..... 156

SPACE ELEVATOR NEGATIVE..... 157

SOLVENCY 157

SPACE SHUTTLE RETIREMENT NEGATIVE	162
HARMS: THE SHUTTLE IS NOT NECESSARY FOR ISS	162
SOLVENCY: THE SPACE SHUTTLE WAS A DEEPLY FLAWED PROGRAM	163
SOLVENCY: SHUTTLE RETIREMENT GOOD FOR NASA	165
SPACE TOURISM NEGATIVE	166
INHERENCY: ALREADY HAPPENING.....	166
SOLVENCY: IMPRACTICAL/UNREALISTIC.....	167
SOLVENCY: TOO EXPENSIVE/FOCUSED ON ELITES.....	171
SOLVENCY: DEBRIS/ENVIRONMENT	175
SOLVENCY: TOO DANGEROUS	179
SOLVENCY: REGULATORY FRAMEWORK DOES NOT EXIST.....	182
SPACE MILITARIZATION NEGATIVE	185
INHERENCY: US IS ALREADY WEAPONIZING SPACE	185
HARMS: NO NEED FOR SPACE WEAPONS	187
HARMS: CHINA IS NOT A THREAT.....	188
SOLVENCY: SPACE WEAPONS ARE INEFFECTIVE/COSTLY.....	191
SOLVENCY: ASYMMETRIC RESPONSE UNDERMINES SPACE WEAPONS.....	193
SOLVENCY: SPACE WEAPONS WILL ENCOURAGE ARMS RACE/CONFLICT	194
SOLVENCY: SPACE WEAPONIZATION WILL ENCOURAGE CHINESE WEAPONS.....	197
SOLVENCY: SPACE WEAPONS WILL JEOPARDIZE SPACE EXPLORATION/USE	200
SOLVENCY: SPACE WEAPONS WILL INCREASE PROLIFERATION.....	202
SOLVENCY: SPACE WEAPONIZATION UNDERMINES US LEADERSHIP	205
SOLVENCY: PASSIVE DEFENSE IS BETTER	207
A/T: TREATY/VERIFICATION FAILS.....	208
WEBB TELESCOPE NEGATIVE	209
INHERENCY: CUTS ARE NOT FINAL.....	209
HARMS: NO IMPACT TO CUTTING PROGRAM.....	210
SOLVENCY: WEBB IS BADLY MANAGED/OVER BUDGET.....	211
SOLVENCY: WEBB UNDERMINES FUNDING FOR OTHER PROGRAMS	213
X-37B SPACE PLANE NEGATIVE	215
SOLVENCY: SECRECY IS DANGEROUS.....	215
SOLVENCY: X-37B IS PERCEIVED AS SPACE WEAPON	216
SOLVENCY: X-37B WILL LEAD TO MILITARIZED SPACE	217
SOLVENCY: X-37B IS A WEAPONS PROGRAM.....	219