



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

February 18, 2014

H.R. 2687 **National Aeronautics and Space Administration** **Authorization Act of 2013**

*As ordered reported by the House Committee on Science, Space, and Technology
on July 18, 2013*

SUMMARY

H.R. 2687 would authorize the appropriation of about \$16.9 billion for 2015 for activities of the National Aeronautics and Space Administration (NASA). The bill would also authorize an amount for 2014 that is roughly the same as the recent 2014 appropriation for NASA.

Assuming appropriation of the authorized and necessary amounts, CBO estimates that implementing H.R. 2687 would cost about \$16.8 billion over the 2014-2019 period. (That figure excludes the effects of funding already enacted for 2014.)

CBO estimates that enacting H.R. 2687 would increase direct spending by \$2.5 billion over the 2014-2024 period for the costs of certain existing contracts. Because the legislation would increase direct spending, pay-as-you-go procedures apply. Enacting the legislation would not affect revenues.

H.R. 2687 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA).

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of H.R. 2687 is shown in the following table. The costs of this legislation fall within budget functions 250 (general science, space, technology) and 400 (transportation).

	By Fiscal Year, in Millions of Dollars						2014- 2019
	2014	2015	2016	2017	2018	2019	
CHANGES IN SPENDING SUBJECT TO APPROPRIATION							
Exploration							
Authorization Level	0	4,007	0	0	0	0	4,007
Estimated Outlays	0	2,404	1,443	80	40	32	3,999
Space Operations							
Authorization Level	0	3,818	0	0	0	0	3,818
Estimated Outlays	0	2,825	916	76	0	0	3,818
Science							
Authorization Level	0	4,627	0	0	0	0	4,627
Estimated Outlays	0	2,313	1,990	185	46	37	4,571
Aeronautics							
Authorization Level	0	566	0	0	0	0	566
Estimated Outlays	0	283	255	17	6	5	565
Space Technology							
Authorization Level	0	500	0	0	0	0	500
Estimated Outlays	0	200	200	75	20	4	499
Education							
Authorization Level	0	125	0	0	0	0	125
Estimated Outlays	0	31	38	33	18	6	125
Cross-Agency Support							
Authorization Level	0	2,600	0	0	0	0	2,600
Estimated Outlays	0	1,534	1,040	26	0	0	2,600
Construction and Environmental Compliance and Restoration							
Authorization Level	0	587	0	0	0	0	587
Estimated Outlays	0	158	205	135	59	29	587
Inspector General							
Authorization Level	0	35	0	0	0	0	35
Estimated Outlays	0	30	5	0	0	0	35
Other NASA Programs and Other Agencies							
Estimated Authorization Level	6	1	1	1	1	1	11
Estimated Outlays	6	1	1	1	1	1	11
Total Changes ^a							
Estimated Authorization Level	6	16,866	1	1	1	1	16,876
Estimated Outlays	6	9,781	6,092	628	189	114	16,811
CHANGES IN DIRECT SPENDING							
Estimated Budget Authority	0	2,000	0	0	0	0	2,000
Estimated Outlays	200	300	2,000	0	0	0	2,500

Note: NASA = National Aeronautics and Space Administration.

a. The total 2014 authorization for NASA would be roughly the same as the amount already appropriated for that year. As a result, this table does not include the bill's specified authorization amounts for 2014.

BASIS OF ESTIMATE

For this estimate, CBO assumes that H.R. 2687 will be enacted in 2014 and that the amounts authorized and estimated to be necessary will be appropriated for each year. Estimated outlays are based on historical spending patterns for the affected agencies and programs.

Spending Subject to Appropriation

H.R. 2687 would specifically authorize the appropriation of nearly \$34 billion for NASA's activities during 2014 and 2015. NASA's annual appropriations for 2014, totaling \$17.6 billion, have already been enacted; therefore, CBO estimates that implementing the legislation would cost about \$16.8 billion over the 2015-2019 period, assuming appropriation of amounts specified for 2015. The specified authorizations for 2015 include:

- *Exploration*: \$4 billion to continue the development of an integrated Space Launch System, the Orion crew capsule, and commercial crew development activities;
- *Space Operations*: \$3.8 billion to fund the International Space Station and space and flight support;
- *Science*: \$4.6 billion for earth science, planetary science, astrophysics, heliophysics, and to continue development of the James Webb Space Telescope;
- *Aeronautics*: \$566 million to conduct research related to air transportation and air traffic safety;
- *Space Technology*: \$500 million to codify the Space Technology Program to develop technologies to advance space exploration;
- *Education*: \$125 million to attract and retain students in the fields of science, technology, engineering, and mathematics;
- *Cross Agency Support*: \$2.6 billion to operate and maintain NASA's nine field centers and other facilities and support NASA's general and administrative activities;
- *Construction and Environmental Compliance and Restoration*: \$587 million to modernize existing facilities, construct new facilities, and ensure compliance with environmental regulations; and
- *Inspector General*: \$35 million to conduct investigations into the ongoing operations of the agency.

In addition to the specified authorizations, CBO estimates that implementing H.R. 2687 would cost about \$11 million for various reports and a NASA advisory council to review NASA's budget and to advise the President and the Congress in matters related to the agency's budget.

Direct Spending

Section 702 addresses how NASA should budget for termination liability in the event contracts for certain programs, including the International Space Station, the Space Launch System, and the Orion crew capsule, are terminated. Based on information provided by NASA, CBO estimates that contracts involving those programs are currently funded at about \$2 billion per year. NASA has obligated but not expended roughly \$500 million under such contracts to cover federal obligations in the event that one or more contracts are terminated. Those obligations include the federal government's liability for such items as severance pay, undelivered work, and rent for unexpired leases.

Under current law, NASA's contracts with private firms may be terminated in two general circumstances. Contracts may be terminated *for cause* because the contractor's performance is unsatisfactory or it has failed to fulfill its obligations under the contract. Contracts may also be terminated *for the convenience* of the government. For example, contracts might be terminated for convenience if the government's needs have changed and it no longer needs the goods or services subject to the contract, or if, in its annual appropriation, the agency receives insufficient funds to continue its expected payment obligations under the contract.

Under the bill, NASA (or its contractors) would be prohibited from reserving any appropriated funds to pay for federal liabilities in the event of a contract termination. Instead, work would proceed under the contract, and all appropriated amounts would be spent to pay for that work. In addition, section 702 would prohibit NASA from terminating contracts for the convenience of the government.

In most years, few NASA contracts are terminated for any reason.¹ Nonetheless, CBO estimates that provisions in H.R. 2687 prohibiting certain types of terminations would increase direct spending for two reasons:

- First, we expect that NASA would spend roughly \$500 million that has been obligated but not expended for contract termination liabilities that would probably not otherwise be spent without this legislation. Those amounts would be spent on routine ongoing costs to fulfill the terms of those contracts in 2014 and 2015; and

1. Government Accountability Office, *NASA Needs to Better Assess Contract Termination Liability Risks and Ensure Constancy in Its Practices*, GAO-11-609R (Washington, DC: July 21, 2011).

- Second, because NASA's contracts could not be terminated for convenience and because no appropriations have been enacted for those contracts beyond 2014, NASA's contractors could make valid claims for breach of their contracts beginning in 2015 if no funds were appropriated for that year to continue those contracts.

By barring NASA from terminating certain contracts for the convenience of the government, section 702 of the bill would increase the government's current obligations under those contracts: Whereas NASA can now terminate those contracts if lawmakers do not provide appropriations sufficient to continue them, subject to certain specified termination costs, that would not be the case if H.R. 2687 was enacted. One perspective, therefore, is that enacting H.R. 2687 would effectively obligate the government to continue funding those contracts, since the government would have no legal way to terminate them. From that perspective, the bill would create an additional \$13 billion in government obligations over the next 10 years.

But even if H.R. 2687 was enacted, lawmakers might still decide to end one or more of those programs. If so, NASA's contractors would be able to assert breach-of-contract claims and the government would probably have to compensate them. CBO estimates that such compensation would be roughly equivalent to the value of one year of contract payments, or about \$2 billion in 2016, if all of the affected programs were terminated. Those amounts would probably be paid from the Judgment Fund (a permanent, indefinite appropriation that is available to pay court judgments against federal agencies).

Therefore, since no appropriations have yet been provided to fund the existing contracts beyond fiscal year 2014, CBO estimates that, at a minimum, enacting section 702 would create direct spending authority totaling \$2 billion, which would result in outlays in fiscal year 2016.

PAY-AS-YOU-GO CONSIDERATIONS

The Statutory Pay-As-You-Go Act of 2010 establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. The net changes in outlays that are subject to those pay-as-you-go procedures are shown in the following table.

CBO Estimate of Pay-As-You-Go Effects for H.R. 2687 as ordered reported by the House Committee on Science, Space, and Technology on July 18, 2013

	By Fiscal Year, in Millions of Dollars											2014-	2014-
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2019	2024
NET INCREASE IN THE DEFICIT													
Statutory Pay-As-You-Go Impact	200	300	2,000	0	0	0	0	0	0	0	0	2,500	2,500

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

H.R. 2687 contains no intergovernmental or private-sector mandates as defined in UMRA.

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