SpacePolicyOnline.com
A product of Space and Technology Policy Group, LLC

Fact Sheet
Updated August 29, 2013

NASA'S FY2013 BUDGET

Congress finally completed action on the FY2013 appropriations bills on March 21, 2013, passing a second Continuing Resolution (CR). Table 1, which beings begin on page 6 below, shows the outcome of the FY2013 budget cycle, including figures from NASA's FY2013 operating plan. That operating plan was agreed to by Congress and the White House only in mid-August 2013, about 6 weeks before the end of the fiscal year. NASA still has not released the operating plan to the public, but at the request of SpacePolicyOnline.com, provided the figures that appear in Table 1 on August 29, 2013.

Since there is particular interest in funding for planetary science because of a substantial cut (about 20%) proposed by the Obama Administration in FY2013, Table 2 shows the outcome of the FY2013 funding debate for that discipline within the Science Mission Directorate. The data in the table, which includes FY2013 operating plan figures for planetary science programs, are from a chart included in a September 4, 2013 presentation by NASA Planetary Science Division Director Jim Green to a National Research Council committee.

FY2013 CONTINUING RESOLUTIONS

NASA's funding for FY2013 is provided through two CRs. The first (H. J. Res. 117, P.L. 112-175) covered October 1, 2012-March 27, 2013. The second (H.R. 933) covers the remainder of the fiscal year (through September 30). The text of H.R. 933 and its accompanying explanatory statement – which includes a table of NASA funding – is posted on the Senate Appropriations Committee's website (http://appropriations.senate.gov) under news items for March 11, 2013.

The first CR dealt with all government agencies in the same manner, essentially holding them to their FY2012 appropriated levels (plus a 0.612 percent across-the-board increase). The second CR is quite different in at least two respects.

- Five of the 12 regular appropriations bills were included in this CR – Defense, Military Construction/Veterans Affairs, Agriculture, Homeland Security, and Commerce-Justice-Science (CJS). CJS includes NASA, as well as NOAA. Agencies funded in those five regular appropriations bills, therefore, have brand new appropriations bills with language that approves (or disapproves) proposals to initiate, change or terminate programs or otherwise spend the appropriated funds. The agencies in the other seven bills are held to the language and funding levels in their FY2012 bills unless specific exceptions are made.
- Although the funding figures in the second CR might look good at first glance (see the next to the last column in the following table), they are subject to cuts pursuant to sections 3001, 3002 and 3004 of the bill. Section 3001 imposes across-the-board rescissions on many agencies, including a 1.877 percent rescission for NASA.

By Marcia S. Smith

> Section 3002 affirms that nothing in the bill changes the across-the-board spending cuts known as the "sequester" imposed by the Budget Control Act of 2011, a reduction of 5 percent for NASA. An additional cut was made under section 3004 which directed the Office of Management and Budget to make any necessary across-the-board reductions to ensure the total amount appropriated in the bill did not exceed agreed-upon budget caps. The bill required that the cuts – a total of about 7 percent for NASA -- be applied "proportionately" to each budget account and "program, project and activity" within those accounts.

The question of how the Obama Administration would implement these funding reductions for NASA remained unclear until mid-August 2013 when the FY2013 NASA operating plan was finally agreed to by Congress and the Administration. Not all programs, projects and activities were affected equally.

HISTORICAL SUMMARY

The President's FY2013 Budget Request and Congressional Action in 2012

President Obama submitted his FY2013 budget request to Congress on February 13, 2012. For NASA, he requested $17.711 billion, a slight decrease from the agency's funding level of $17.770 billion for FY2012 (Congress appropriated $17.800 billion, but also included a rescission that reduced that amount by $30 million).[1]

The table below shows the FY2012 appropriated level (as adjusted) and the FY2013 request and tracks congressional action as the debate progressed. All the numbers for FY2012 and the FY2013 request are from FY2013 budget material posted at NASA's budget website http://www.nasa.gov/budget.[2]

As usual, NASA changed some of its accounts and subaccounts making it difficult to compare figures from one year to another. Also, in some cases – notably funding for the Space Launch System (SLS) – program funding may appear in more than one line in the budget. According to NASA, the total request for SLS is $1.88 billion, including the amounts in the SLS and Exploration Ground Systems lines under Human Exploration and Operations, plus $143.7 million in the Construction and Environmental Compliance and Remediation (CECR) account.

"Commercial Spaceflight" in the Exploration account is a reference to development of "commercial crew" systems only. The money NASA pays for commercial *cargo* services developed through the Commercial Orbital Transportation Services (COTS) program is in the International Space Station budget under Crew and Cargo Transportation.

In 2012, the House passed the Commerce-Justice-Science (CJS) appropriations bill, which includes NASA, but the Senate did not; it was reported from the Senate Appropriations Committee, but did not reach the Senate floor.

---

[1] To complicate matters, the rescission was from prior year funds, not FY2012 funds, but NASA was required to show the reduction as though it happened in FY2012. The figures in this report for FY2012 and the FY2013 request are from NASA's budget books, which show the $30 million as a cut from FY2012. The House and Senate reports do not reflect the $30 million rescission, however, so the numbers are different. In the congressional reports, for example, the total for NASA in FY2012 is $17.800 billion not $17.770 billion. The discrepancy spans NASA's budget accounts. NASA's budget books show that science received $5.074 billion in FY2012, but the House and Senate reports show it as $5.090 billion, for example. This report uses the figures in the NASA budget book.

- The Senate Appropriations CJS subcommittee marked up its version of the FY2013 CJS bill on April 17, 2012, followed by full committee markup on April 19, 2012 (S. 2323, S. Rept. 112-158). The bill died at the end of the 112th Congress.
- The House CJS subcommittee marked up on April 19, 2012, followed by full committee markup on April 26, 2012 (H.R. 5326, H. Rept. 112-463). The House passed its bill May 10, 2012 after adopting an amendment that would have cut $126 million from the Cross Agency Support budget line in order to pay for a community policing program at the Department of Justice. Several other amendments that would have taken money from NASA to use elsewhere were defeated. The bill died at the end of the 112th Congress.
- Instead of passing those bills, Congress passed a Continuing Resolution (CR) covering the time period October 1, 2012 – March 27, 2013 (H.J. Res 117, P.L. 112-175). There is no substantive language about NASA in the CR; it simply funds every government agency at its FY2012 level plus a small across-the-board increase.

Congressional Action In 2013

Debate continued in the 113th Congress, resulting in final passage of a second FY2013 CR, H.R. 933, on March 21, 2013. That CR includes the regular FY2013 CJS appropriations bill, making specific budget allocations to NASA's budget accounts, programs, projects and activities and providing extensive guidance to NASA in an accompanying explanatory report on how to spend those funds. The House passed H.R. 933 first, but it was changed substantially in the Senate and the House then adopted the Senate version. The Senate version of the bill and the Senate Appropriations Committee's explanatory report are posted on the committee's website. Amendments were adopted during floor debate, but they did not affect NASA, so the documents on the committee's website reflect the final outcome (but the funding figures must be adjusted for the rescission and the sequester as explained at the beginning of this report).

THREE KEY ISSUES

Senate Proposal to Move NOAA Satellite Programs to NASA. In its 2012 report (S. Rept. 112-158) on the CJS bill, the Senate Appropriations Committee directed that the National Oceanic and Atmospheric Administration's (NOAA's) satellite programs be transferred to NASA because the committee was concerned that NOAA was not properly managing the programs. The committee shifted the associated $1.6 billion from NOAA's budget to NASA's. Under this scenario, NOAA would continue to operate weather/environmental satellites, but development and procurement of the satellites would be done by NASA. NASA already is the acquisition agent for NOAA's satellites, but NOAA defines the requirements, obtains the money, manages the programs, and reimburses NASA for its work. The Senate committee's proposal would put NASA directly in charge, except for operations, which would remain in NOAA. A Senate Appropriations Committee press release stated that it would save $117 million in FY2013 alone.

The Senate committee created a new budget account, Operational Satellite Acquisition, in NASA's budget for this activity. The Senate committee's recommended total for NASA therefore was $19.4 billion. If the NOAA funds were not included, the Senate committee report stated that it was recommending $47.1 million more than the FY2013 request, or $17,758.5 billion.

The House did not take similar action.

In the final FY2013 CR (H.R. 933), the Senate committee withdrew its direction to transfer the programs to NASA while restating its concerns about NOAA's program management abilities.

It recommended that NOAA consider transferring one of the programs, Jason 3, to NASA, but did not insist upon it. There was other substantive language about NOAA's satellite programs, but that is outside the scope of this report.

Robotic Mars Exploration. NASA's plans for sending robotic probes to explore Mars drew considerable interest after the Obama Administration proposed deep cuts to the Mars program that forced NASA to withdraw from planned substantial participation in two Mars missions with the European Space Agency (ESA) in 2016 and 2018. However, the White House Office of Management and Budget (OMB) allowed NASA to reformulate its Mars exploration program, with the possibility of a new robotic Mars mission later in the decade. That effort is referred to in the budget as Mars Next Decade.

NASA requested $360.8 million in total for Mars Exploration for FY2013, of which $62 million was for Mars Next Decade. In 2012, the Senate committee added $100 million to the $360.8 million request for planetary science, stating in its report (p. 91) that the funding should be used in part to support any re-planned Mars program and "to retain U.S. competencies in areas such as entry, descent and landing (EDL)."

In 2012, the House approved $150 million for Mars Next Decade, an $88 million increase above the request. The House report stated (pp. 65-66) that the added funds were for whatever new Mars mission NASA defined as long as the National Research Council (NRC) certified that the mission supported the top priority goal for large missions enunciated in the 2011 NRC Decadal Survey for planetary science, which is for a series of missions that ultimately would return a sample of Mars to Earth. If the NRC did not make that certification, the money was to be used for the second priority mission in that study -- a mission to Jupiter's moon Europa.

In December 2012, NASA announced a new plan for robotic Mars exploration – a Mars rover for launch in 2020. Earlier it had selected a Mars mission as the next in its Discovery series of competed missions. Called InSight, it is scheduled for launch in 2016. NASA already is developing a Mars mission named MAVEN for launch in 2013. Thus, despite the concerns, NASA is back on track to launch Mars missions every 26 months for the rest of the decade with the exception of 2018, although it is making a modest contribution to ESA's 2018 mission.

The final FY2013 CR provided $450.8 million for Mars exploration, of which $146.4 was for MAVEN, $65 million for operation of the Mars Science Laboratory (Curiosity), and $239.4 million for "other" Mars activities that are responsive to the NRC's Decadal Survey, but the requirement that the plans be reviewed by the NRC was omitted. Those funding figures do not reflect the actual amount available, however, after the rescissions and sequester are applied.

As shown in the data provided by Jim Green on September 4 (see Table 2 below), the final FY2013 budget allocation for Mars exploration was only $369.5 million.

Commercial Crew. In 2012, the House and the Senate committee both cut NASA's request for commercial crew significantly. NASA requested $830 million. The House approved $500 million, and the Senate committee approved $525 million.

The 2012 House report (p. 71-72) directed NASA to choose ("downselect") one or at most two companies for the third phase of the commercial crew program -- Commercial Crew Integrated Capability (CCiCAP). NASA has been financially supporting four companies (Blue Origin, Boeing, Sierra Nevada and SpaceX) in the second phase of the program, called Commercial Crew Development 2 -- CCDev 2. In 2012, the House also directed NASA to use a traditional

form of contracting under the Federal Acquisition Regulations (FAR) instead of the Space Act Agreements now in place. NASA had planned to transition to FAR-based contracting in 2011, but changed its mind in December 2011 because budget uncertainties led to a desire for greater flexibility provided by the SAA approach.

The 2012 Senate committee report did not go that far, but encouraged (p. 98) NASA to "be mindful … not to take on obligations to more companies than can be practically supported" and notes that NASA assured the committee any subsequent phase of the program would use FAR-based contracting.

In August 2012, NASA chose "2 ½" companies to fund pursuant to an agreement with congressional leaders led by Rep. Frank Wolf (R-VA) who chairs the House CJS appropriations subcommittee. The "2 ½" refers to funding two companies (SpaceX and Boeing) at their full request and one company (Sierra Nevada) at approximately half.

In the final FY2013 CR, Congress provided $525 million for commercial crew. NASA Administrator Bolden indicated he would exempt this program from across-the-board cuts and, indeed, the figures provided by NASA to SpacePolicyOnline.com on August 29, 2013 show that commercial crew was not cut.

Table 1

NASA's FY2013 Budget Request: Congressional Action
(in $ millions, see notes on next pages)

Account	FY2012 Approps	FY2013 Request	House-passed CJS bill, 2012	Senate Approps Cmte CJS bill, 2012	Second CR, 2013 (without adjustments)	Final, 2013 (with adjustments) (see notes)
Science	**5,073.7**	**4,911.2**	**5,095.0**	***5,021.0***	***5,144.0***	***4,781.6***
Earth Science	*1,760.5*	*1,784.8*	*1,775.0*	*1,784.7*	*1,785.0*	*1,659.2*
Planetary Science	*1,501.4*	*1,192.3*	**1,400.0*	**1,292.3*	*1,415.0*	*1,271.5*
Astrophysics	*672.7*	*659.4*	*650.0*	*669.4*	*669.0*	*617.0*
JWST	*518.6*	*627.6*	*628.0*	*627.6*	*628.0*	*627.6*
Heliophysics	*620.5*	*647.0*	*642.0*	*647.0*	*647.0*	*606.3*
Op. Sat. Acq. †			*N/A*	† 1,641.1	N/A	N/A
Aeronautics	**569.4**	**551.5**	**569.9**	**551.5**	**570.0**	**529.5**
Space Tech	**573.7**	**699.0**	**632.5**	**651.0**	**642.0**	**614.5**
Exploration	**3,712.8**	**3,932.8**	**3,711.9**	**3,908.9**	**3,887.0**	**3,705.6**
Expl.Sys & Dev	*3,007.1*	*2,769.4*	*2,881.9*	*N/A*	*3,054.0*	*2,883.8*
(Orion MPCV)	*(1,200.0)*	*(1,024.9)*	*(1,024.9)*	*(1,200.0)*	*(1,197.0)*	*(1,113.8)*
(SLS)	*(1,502.6)*	*(1,340.0)*	*(1,857.0)*	*(1,481.9)*	*(1,454.2)*	*(1,414.9)*
(Expl Grnd Sys)	*(304.5)*	*(404.5)*	*incl. in SLS*	*(394.0)*	*(402.8)*	*(355.1)*
Commercial Spaceflight	*406.0*	*829.7*	*500.0*	*525.0*	*525.0*	*525.0*
Exploration R&D	*299.7*	*333.7*	*330.0*	*308.0*	*308.0*	*296.7*
(Human Res Prog)	*(157.7)*	*(164.7)*	*N/A*	*N/A*	*not shown*	*not shown*
(Adv. Expl Systems)	*(142.0)*	*(169.0)*	*N/A*	*N/A*	*not shown*	*not shown*
Space Operations	**4,187.0**	**4,013.2**	**3,985.0**	**3,961.7**	**3,953.0**	**3,724.9**
Space Shuttle	*556.2*	*70.6*	*70.0*	*70.0*	*70.0*	*38.8*
ISS	*2,829.9*	*3,007.6*	*2,990.0*	*2,957.6*	*2,958.0*	*2,775.9*
(ISS Ops & Mgmt)	*(1,418.7)*	*(1,493.5)*	*not shown*	*not shown*	*not shown*	*not shown*
(ISS Research)	*(222.5)*	*(229.3)*	*not shown*	*not shown*	*not shown*	*not shown*
(Crew/Cargo Trans)	*(1,185.7)*	*(1,284.8)*	*not shown*	*not shown*	*not shown*	*not shown*
Sp & Flt Support	*800.9*	*935.0*	*925.0*	*893.0*	*925.0*	*910.2*
21st Cntry Lch Cplx‡				‡*41.1*	*not shown*	*not shown*

Account	FY2012 Approps	FY2013 Request	House-passed CJS bill, 2012	Senate Approps Cmte CJS bill, 2012	Second CR, 2013 (without adjustments)	Final, 2013 (with adjustments) (see notes)
Education	**136.1**	**100.0**	**100.0**	**125.0**	**125.0**	**116.3**
Arsp Res/Career Dev	*56.1*	*33.0*	*33.0*	*not shown*	*58.0*	*54.0*
(Space Grant)	*(38.9)*	*(24.0)*	*(24.0)*	*40.0*	*(40.0)*	*(37.2)*
(EPSCoR)	*(17.3)*	*(9.0)*	*(9.0)*	*18.0*	*(18.0)*	*(16.7)*
STEM Ed/Accntabilty	*80.0*	*67.0*	*67.0*	*27.0*	*67.0*	*62.3*
(MUREP)			*(30.0)*	*30.0*	*not shown*	*(27.9)*
(STEM Ed & Acct Projects)					*not shown*	*(25.1)*
(NASA Vis. Ctrs/Informal Ed)			*N/A*	*10.0*	*not shown*	*(9.3)*
Cross-Agency Spprt	**2,993.9**	**2,847.5**	****2,717.4**	**2,822.5**	**2,823.0**	**2,711.0**
CECR	**487.0**	**619.2**	**598.0**	**679.0**	**680.0**	**646.6**
Inspector General	**38.3**	**37.0**	**38.0**	**37.8**	**38.0**	**35.3**
Prior Approps Accts	**-1.0**	**0.0**	**N/A**	**N/A**	**N/A**	**N/A**
Total	**††17,770.0**	**17,711.4**	****17,447.8**	**19,399.6**	**17,862.0**	**16,865.2**
(w/o Op Sat Acq)†				**† (17,758.5)**	**N/A**	**N/A**

Notes: Totals may not add due to rounding. NA = not applicable or not specified (for "Op. Sat. Acq" see footnote † below)

Figures for the FY2012 appropriations and FY2013 request are from NASA's FY2013 budget material at http://www.nasa.gov/budget. Figures for the House-passed bill are from the committee's 2012 report (H. Rept. 112-463) adjusted for the amendment adopted during floor debate on May 8, 2012 reducing the Cross Agency Support line by $126 million. Figures for the Senate committee bill are from the committee's 2012 report (S. Rept. 112-158). Figures for the second Continuing Resolution (CR) passed in March 2013 are from the Senate committee's explanatory statement as posted on its website (http://appropriations.senate.gov) under the news items for March 11, 2013 ("explanatory statement for the Senate Substitute Continuing Resolution"). Figures for final FY2013 were provided by NASA to SpacePolicyOnline.com upon request on August 29, 2013. They are from the operating plan that the Administration and Congress agreed to in mid-August. NASA has not released the operating plan to the public. Under the terms of the second CR, H.R. 933 (Division G, Other Matters), NASA was subject to a 5 percent sequester, a 1.877 percent rescission and other adjustments that were to be applied to each "program, project and activity" proportionately, but some NASA programs were protected from these adjustments as shown in the table (such as the James Webb Space Telescope and commercial crew).

See footnote 1 in the text for further clarifications about the differences between the numbers for FY2012 shown in NASA's budget book versus what is shown in the congressional reports.

Numbers in italics are subsets. Numbers in italics (in parentheses) are sub-subsets. Note that in the education account, the Senate committee did not use the subsets in the NASA budget request, and the House broke out the figure for the Minority University Research and Education Program (MUREP), $30 million, and the remaining $37 million is generally for STEM Education and Accountability Projects.

*In the House, not less than $150 million for Mars Next Decade (an increase of $88 million above the request). In the Senate, $100 million is restored for Mars exploration resulting in a total of $461 for Mars exploration, of which Mars Next Decade is a part. See preceding text for further information.

** Reflects House adoption of an amendment during floor debate that cuts $126 million from NASA's Cross Agency Support account.

† As discussed in the text, the 2012 Senate Appropriations Committee report called for the weather/environmental satellite programs at the National Oceanic and Atmospheric Administration (NOAA) to be transferred to NASA, along with their funding. The committee created a new NASA account, Operational Satellite Acquisition, for this funding. The final version of the FY2013 Continuing Resolution, however, does not transfer the programs from NOAA to NASA.

†† See footnote 1 in the text for an explanation of why NASA's budget book shows a total of $17.770 billion for FY2012 yet the House and Senate reports show $17.800 billion. This table uses the figures in NASA's budget book.

‡ 21st Century Launch Complex is included in NASA's request for Space and Flight Support. In its 2012 report, the Senate Appropriations Committee chose to break it out separately, but recommended the same amount as the request, $41.1 million. The funding is to revitalize infrastructure primarily at NASA's Kennedy Space Center.

Table 2

PRESIDENT'S FY14 PLANETARY SCIENCE BUDGET
PLUS AN APPROVED FY13 BUDGET*
(in $ thousands)

Planetary Science Division	FY2012	FY2013 Operating Plan	FY2014 Request	FY2015**	FY2016**	FY2017**	FY2018**
Planetary Research	174,087	192,672	220,600	233,300	229,100	230,400	232,200
Lunar Quest	139,972	71,845	17,700	0	0	0	0
Discovery	172,637	207,414	257,900	268,200	242,300	187,500	215,000
New Frontiers	143,749	158,770	257,500	297,200	266,500	151,000	126,200
Mars Exploration	587,041	369,529	234,000	227,700	318,400	504,700	513,200
Technology	161,899	123,434	150,900	142,800	144,700	154,400	140,000
Outer Planets	122,054	147,836	79,000	45,600	24,400	26,400	26,000
TOTAL	1,501,439	1,271,500	1,217,600	1,214,800	1,225,400	1,254,400	1,252,600

*Adapted from a Powerpoint chart included in a September 4, 2013 presentation to the National Research Council's Committee on Astrobiology and Planetary Science (CAPS) by James Green, NASA Division Director for Planetary Science.

**Funding figures for FY2015 and beyond are notional.