

Ibero-America and Caribbean Choose To Look to the Stars To Build a Future

by Cynthia R. Rush

Oct. 25—In a beautiful expression of scientific and technological optimism, on October 9 the foreign ministers of Argentina and Mexico, Felipe Solá and Marcelo Ebrard respectively, signed a “Declaration on the Constitution of a Regional Mechanism for Cooperation in Space,” leading to the creation of a Latin American-Caribbean Space Agency (ALCE). Signed virtually during the celebration of the United Nations’ World Space Week October 4-10, the declaration states it intends to create a platform “to invite the rest of the membership of CELAC,” the Community of Latin American and Caribbean States, to become part of this effort. The idea of creating a regional space agency is not a new one; but today, when the forging of a new economic and security architecture is particularly urgent, given the global financial collapse and threat of war, the proposal is very timely.

That Argentina and Mexico are spearheading this initiative—Mexico is the president pro-tem of CELAC—is also significant. Argentine President Alberto Fernández and Mexico’s Andrés Manuel López Obrador, or AMLO as he is known, are political allies in opposing the neoliberal world order and the geopoliti-



Government of Mexico

*Marcelo Ebrard,
Foreign Secretary of
Mexico.*



*Felipe Solá,
Argentina’s Minister
of Foreign Affairs.*



CONAE/Manuel Mazzanti

*SpaceX’s Falcon 9 carries Argentina’s
SAOCOM 1B satellite into orbit, August
30, 2020.*

cal ravings and regime-change threats of Secretary of State Mike Pompeo in the region. AMLO’s positive relationship with President Donald Trump also likely serves as a useful channel for Fernández’s communications with the White House, as he grapples with a daunting economic crisis and upcoming negotiations with the IMF. For both leaders, the defense of sovereignty, including scientific and technological sovereignty, is primary.

Announced in the midst of the coronavirus pandemic and the economic crisis it has triggered, this bold initiative has nonetheless sparked great enthusiasm. Governments, scientific sectors, and academic institutions are hopeful that this new platform can serve as a science driver for the region’s economic and scientific development, including in the field of medicine, especially for young people who are inspired by the idea of space exploration.

By coordinating activities with the relevant Ibero-American and Caribbean nations, the new entity is intended “to operate as a catalyst for regional efforts, privileging the development of space-related projects,”

whose numbers will be increased “by attracting the talent of Latin American and Caribbean youth,” the joint declaration states. The new agency will also serve as an impetus for U.S., European, Russian, Chinese, and Indian space agencies to expand their already significant cooperation with governments, and state and private institutions involved in satellite production and other space-related activities.

A Game-Changer for the Region?

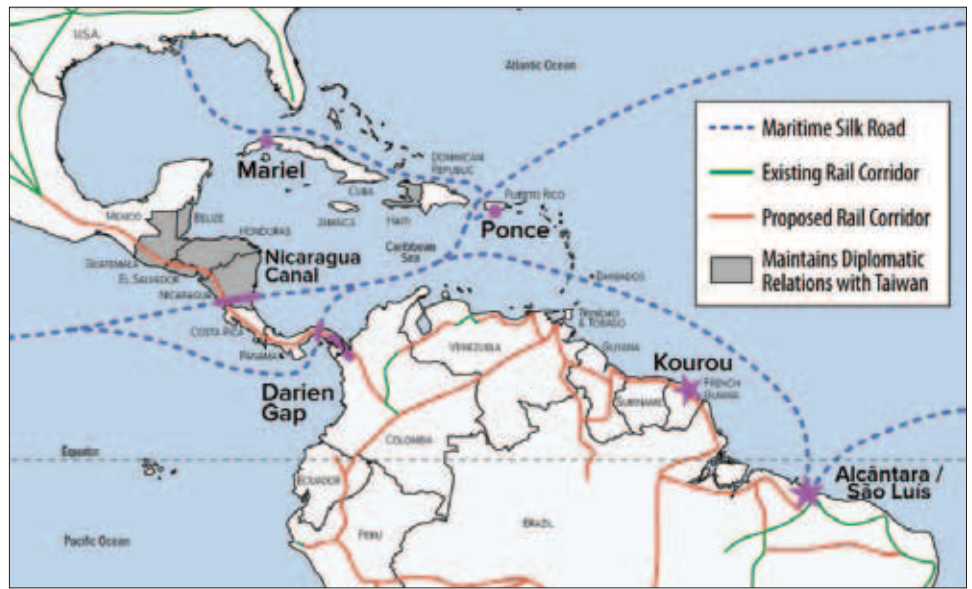
It is precisely this kind of concerted international effort in the area of advanced science that will be crucial to creating the needed science driver for the entire region, engaging a downtrodden labor force in the effort and inspiring youth.

Volume II of the Schiller Institute’s [report](#), “The New Silk Road Becomes the World Land-Bridge,” emphasizes as an example that “fostering a renaissance of coordinated space launches and other space science activities at the two existing launch sites nearest to the Equator”—the European Space Agency’s site at Kourou, French Guiana and the Brazilian Space Agency’s site at Alcantara, Brazil—“could be a game-changer for all of Ibero-America and the Caribbean.”

With the exception of Cuba, which has space cooperation and satellite agreements with Russia, Caribbean nations generally have not yet developed space programs, but there is great interest in doing so, seen in the October 2018 founding of the Caribbean Space Society. The Schiller report suggests that because of its significant oil and petrochemical activity, and the training this has provided to a stratum of local workers, Trinidad & Tobago possesses a labor force “most suited to rapid participation in this area of scientific endeavor.”

The Colonials are Getting Uppity

As both Solá and Ebrard emphasized, the plan to create a regional space agency contradicts the idea that poor or developing countries shouldn’t even think



EIRNS

Fostering cooperation and coordination in space science will bring a scientific renaissance to all of Ibero-America and the Caribbean. Shown on the map of Belt and Road corridors are the two excellent launch sites nearest the Equator: Kourou, French Guiana and Alcantara, Brazil.

about investing in space exploration or scientific development. Remember Barack Obama’s disgusting advice to African nations not to dream of adopting advanced technology lest it cause the planet to “burn up”? Rather, as Solá put it, the development of space activities is a “factor in development,” adding that the joint declaration “is a message to the world: a region that is a bit backward globally, thinking in terms of other regions of the world, makes an effort to change and to send a different message ... to the rest of the world.”

Diego Hurtado, Argentina’s Secretary of Policy and Planning in Science, Technology and Innovation, put it this way: “We see [the space sector] as an ‘industrializing’ industry ... understanding that the space sector is a great vector for building capacities for our economic sector.”

Marcelo Ebrard emphasized that Mexico firmly believes that the sharing of knowledge and expanding capabilities in the fields of science and technology are “fundamental for the economic and social development of our nations, aside from strengthening the integration and autonomy of Latin America and the Caribbean in the world.” This initiative, he said, “in essence means that we don’t resign ourselves to being a continent ... [that plays] a secondary role in anything.” Rather, “we aspire to have a more relevant role on behalf of our nations, and that’s what the commitment and the resolu-

tion mean.” British geopoliticians and Malthusian depopulation fanatics would say that the colonials are getting rather uppity with such ideas.

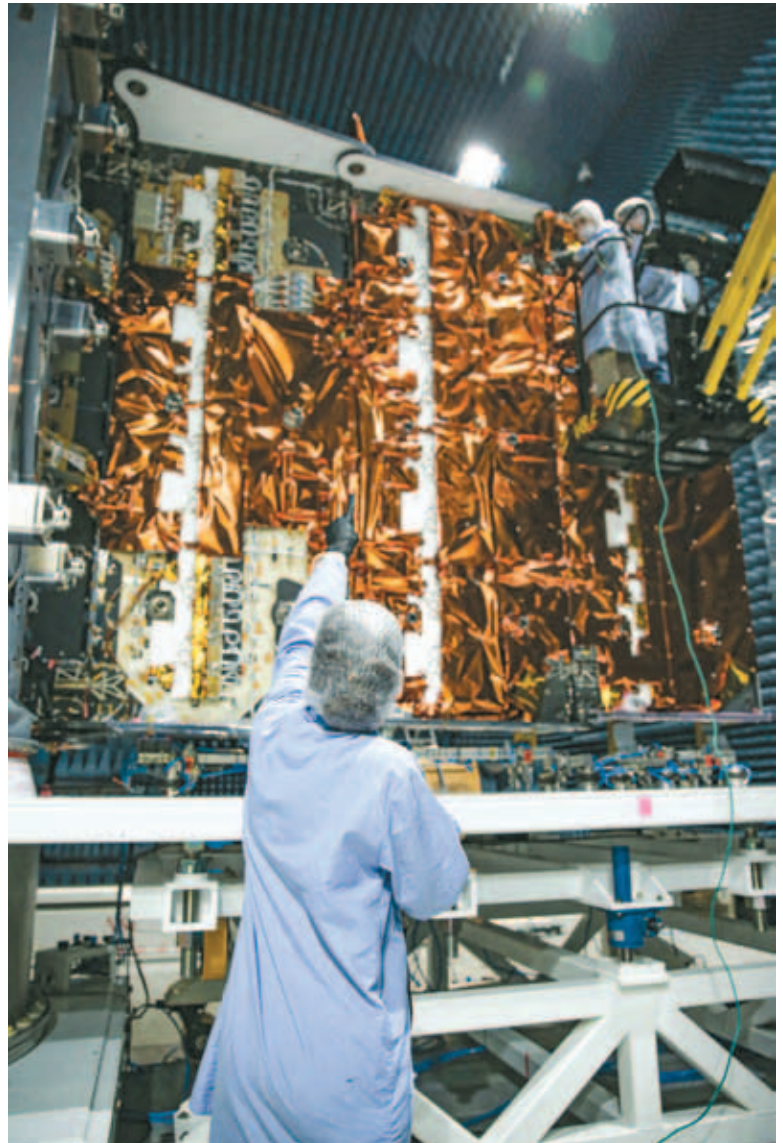
Intelligent Cooperation in the Midst of Pandemic

As the current president pro-tem of CELAC, Mexico had put forward the proposal for a regional space agency as the first point of its 2020 Working Plan, which was then agreed upon during a Latin American-Caribbean Conference on Space held last July. Marcelo Ebrard explained following the October 9 ceremony that it was unclear whether the signing of the declaration could even take place because of the pandemic; but what the pandemic has proved, he said, is that cooperation “is not only desirable, but also the most intelligent and practical way” to proceed. He celebrated that even in the midst of a pandemic, “we’ve reactivated CELAC!” an entity which has been particularly important in promoting cooperation between China and Latin America and the Caribbean in various fields, including science and technology.

Along with Brazil, Argentina has the most advanced space program in Ibero-America, dating back to the latter part of the 19th century, when American System astronomer Benjamin Althorpe Gould, who had studied in Germany under Carl Gauss, arrived in the city of Córdoba in 1870 to build the National Observatory, at the same time that a group of German scientists linked to Alexander Von Humboldt’s scientific tradition arrived to transform Córdoba’s National University into an institution of scientific excellence spanning many fields of study. These interventions, from two different continents, had a lasting effect on the development of Argentine science.

In the early decades of the 20th century, German, Italian and other European scientists and aeronautics experts worked alongside their Argentine counterparts to build indigenous aeronautical and rocket technology that rivaled that of more advanced nations.

Argentina’s National Space Activities Commission (CONAE), whose director Raúl Kulichevsky attended



CONAE
Argentine workers assemble the SAOCOM 1B satellite, launched August 30, 2020 from Cape Canaveral. CONAE has been invited to participate in the Artemis program.

the October 9 ceremony, is respected internationally for its achievements, and has worked closely with NASA on a number of occasions, most recently with SpaceX’s August 31 launching of Argentina’s SAOCOM-1B satellite from Cape Canaveral. In a March 2019 meeting with Kulichevsky, NASA administrator Jim Bridenstine invited CONAE to participate in the Artemis program, to return humans to the Moon in 2024.

Argentina thus brings valuable experience to the plan to create a regional space agency, even as it rebuilds the aerospace capabilities—including the devel-

opment of a satellite rocket launcher and ramping up of its “Access to Space” program—that neoliberal President Mauricio Macri completely shut down during his 2015-2019 presidency.

But as *EIR*’s Marsha Freeman documents in her excellent [article](#), “Ibero-America Needs a Space Agency!” (*21st Century Science and Technology*, Spring 2002, pp. 31-54), several Ibero-American nations—Argentina, Brazil, Peru, Chile, and Mexico among them—have an impressive history of pioneering in space, some dating back to the latter part of the 19th century, a history characterized by intense international scientific cooperation involving the U.S., Germany, and other nations. In the 1990s, the international non-proliferation mafia succeeded in shutting down some of the region’s most significant achievements in advanced rocket technology, such as Argentina’s Condor rocket, lying that they were really nuclear weapons programs. But it didn’t squelch these nations’ desire to have space programs or cancel the inspiration of young people to reach for the stars.

Today, every country in South America, with the exception of Uruguay, has either a state-sponsored space agency, or a privately-funded equivalent, such as Ecuador’s Civil Space Agency (EXA). In Central America, the Costa Rican Legislative Assembly is currently debating the creation of a national space agency, while on September 25, a majority of members of the Central American Parliament (Parlacen) approved a resolution to create a Central American Space Agency (AECA). While this resolution isn’t binding on member governments, it creates impetus for the summit of Heads of State and Government of the Central American Integration System (SICA) to approve the agency’s creation.

International Collaboration

Exemplary of the ferment in the region was the First Russia-Latin America Space Cooperation Forum for

Central America and the Caribbean, which also took place during World Space Week on October 6 and included members of Parlacen, Russian government authorities, and even Russian astronauts Ivan Vagner and Anatoli Ivanishin, speaking from the International Space Station, *Sputnik* reported October 12.

Young people also participated in the First Central American and Caribbean Youth Conversation with Russian cosmonauts. Nicaraguan legislator Daniel Ortega Reyes, head of Parlacen’s international affairs committee, who is promoting the creation of a Central American space agency, told *Sputnik* that “all children who live in Central America and the Caribbean have dreamed of, and know about space. They’ve all wanted to be astronauts, cosmonauts and say ‘I want to do [space] travel.’ It’s a dream.” Now, he added, young people in the region rightly believe

that this dream is possible, “unlike previous decades in which space was beyond all possible desires.”

Russia’s involvement also includes sponsoring a Central American Space Academy, based in Guatemala, with an educational program focused on aerospace science for the region’s children and youth. The program was elaborated by the State University of Southwestern Russia and its Center for Scientific-Technical and Innovative Cooperation with Ibero-American Countries. Center Director Nikolai Frolov reports that the goal is to physically open the new Academy on Russian Cosmonaut Day next April, but if the pandemic persists, classes will begin remotely, probably beginning in January 2021. Course material has already been translated into Spanish and classes will be transmitted remotely from Moscow. According to

the Russian embassy in Guatemala, those who complete the Academy’s educational program may be eligible for scholarships offered by the Russian Federation to continue their studies at Russian universities.

The plan to create a Costa Rican space agency is particularly interesting, given that nation’s impressive



AEXA
Logo of the Mexican Space Agency.



LATCOSMOS
Logo of the Space Development Plan for the Latin American and Caribbean Regions.

educational and institutional capabilities, including the Costa Rica Institute of Technology's space lab (SETEC) and several top-notch university programs. The many missions aboard the Space Shuttle of Costa Rican astronaut Franklin Chang Diaz has been a constant source of inspiration for the nation's scientific community as well as its youth.

In an interview with Canadian Bruce James Callow, coauthor of the book *To the Stars: Costa Rica in NASA*, congresswoman Aida Montiel, who introduced the bill for the creation of a national space agency, explained that the agency's key purpose will be to "create agreements and strategic alliances with public and private organizations such as NASA and other space agencies around the world." A space center to be created by the new agency, located in Liberia, Guanacaste province, in northwestern Costa Rica, she said, will position this region "as a cluster specialized in aerospace research and development. It will be unique in Costa Rica and Central America."

A Private Latin American Space Mission

Costa Rica's SETEC space lab is also involved in what will be the first privately financed and organized Latin American Space Mission, taking place under the aegis of LATCOSMOS, an initiative of Ecuador's private EXA agency, and adopted by the International Astronautical Federation's Latin American and Caribbean Regional Group (GRULAC). EXA is financing the project, which will include four Latin American scientists/astronauts—commanded by Ecuador's Ronnie Nader, and including Adolfo Chávez of Costa Rica's SETEC Lab and Technology Institute, Alberto Ramírez, a leading space engineer and professor from Mexico's National Autonomous University (UNAM), and Margot Solberg, a science educator based in Quito, Ecuador.

Nader is an experienced astronaut, having flown seven space missions, and is also father of Ecuador's first satellites. He was trained at the Gagarin Cosmonaut Training Center in Russia under the auspices of the Ecuadorian Air Force. In comments to India's *Financial Express* October 9, he explained that the purpose of the mission, for which a date hasn't yet been set, is to "demonstrate that Latin America can undertake joint space missions."

The mission involves a brief trip to suborbital space aboard the New Shepard reusable vertical takeoff and landing vehicle produced by the Blue Origin company. During the 10-minute flight, each of the crew will per-



Commander Ronnie Nader, the father of Ecuador's first satellites and Ecuador's first astronaut, has flown seven space missions.

form experiments related to microgravity before returning to Earth. "We want to make history with this first Latin American mission to demonstrate capability and unity, while carrying out technical and scientific goals," the www.tec.ac.cr website reported Nader as saying on September 24.

Nader emphasized that the biggest challenge for the astronauts will be once they land back on Earth, because "they are going to inspire youth by example. They will demonstrate Latin American unity—that we're capable of leaving aside our differences and be bold enough to do great things." As the four individuals chosen for this mission are also educators, Nader pointed out that "for a kid who has an astronaut in front of him, someone who flew in space—that can change his life." Costa Rican astronaut Franklin Chang Diaz's several NASA Space Shuttle flights "were an inspiration for an entire generation," Nader emphasized. "I always say that for a generation of Costa Ricans, it was our 'Apollo' moment."