ULA



IN REVIEW



TWO BAD DAYS Questioning conventional wisdom after Antares, Virgin Galactic/Page 4

The year brought out **aggressive litiga**tion and a bit of international mischief as launch industry giants elbowed and jostled each other for advantages. The long-dominant United Launch Alliance, a joint venture between Boeing and Lockheed Martin, is fending off legal attacks from SpaceX, industrial base challenges from Russia and the merger of two competitors in Orbital Sciences Corp. and Alliant Techsystems, known as ATK.

SpaceX filed a protest against the U.S. Air Force for its decision to award a sole-source block-buy contract for 36 launches to ULA. While SpaceX argued the deal is wasteful for taxpayers, the Air Force disagreed and defended its buy as a good deal for the taxpayer. The U.S. government asked a federal court to dismiss the lawsuit, arguing SpaceX lost its right to protest by not challenging the solicitation when it was issued in 2012.

For a short while, SpaceX secured a U.S. Court of Federal Claims preliminary injunction that blocked ULA and the Air Force from purchasing RD-180 engines used in ULA's Atlas 5 rocket. The relatively inexpensive but very capable RD-180 is produced by Russian company NPO Energomash. That company is caught up in contentions that it should be sanctioned in response to the growing crisis in Ukraine and Russia's illegal invasion and seizure of portions of that nation. It had been argued that payments for the engines effectively benefited Russian Deputy Prime Minister Dmitry Rogozin, who is subject to U.S. economic sanctions under Executive Order 13661. ULA contends the engine purchases should not be subject to sanctions. SpaceX was accused of trying to disrupt vital national security launches. The U.S. government formally filed a motion to dismiss the injunction, and that motion was granted.

In April, Orbital Sciences and ATK announced merger plans to create a new \$5 billion company to be called Orbital ATK, whose offerings will include launch vehicles, satellites and defense systems.

While launch companies moved to enlist congressional and bureaucratic support for their respective interests, the legal dust-ups highlighted an important issue: whether the U.S. should stick with ULA, a proven entity that has achieved over 100 consecutive launches, or move in new directions in an attempt to achieve cost savings in an era of declining budgets. Stirring the pot, Rogozin threatened to no longer allow RD-180s to be used for launches of U.S. military spacecraft, though he has yet to follow up on the threats. In the meantime, the

Air Force took programmatic steps to reduce acquisition risks associated with any lost access to the RD-180s.

The Air Force verified that SpaceX's Falcon 9 v1.1 rocket completed three flights. The completion of three flights is one part of the process for SpaceX to achieve certification and be eligible to be awarded contracts as part of the Evolved Expendable Launch Vehicle program.

The Space Data Association signed an agreement to participate in the U.S. Defense Department's Space Situational Awareness Sharing Program. The SDA press release says that it is the DoD's first such agreement with a non-satellite operator. The U.S. Strategic Command administers the SSA Sharing Program, which is intended to increase the safety, security and sustainability of the space domain.

The satellite industry celebrated moves to finalize regulations that remove some satellite hardware and technologies from the U.S. Munitions List, a registry of militarily sensitive technologies whose exports are tightly controlled by the State Department. The new rules, which go into effect 180 days after its May 7 draft was published, move items from the USML to the Commerce Control List and ease their export to 36 countries. Exports of space-related hardware, technologies, and services to China and certain other countries remain strictly controlled, however.

Unmanned aircraft systems continue to generate a smorgasbord of legislative and litigation responses to explosive growth in the use of small, affordable flying cameras. Companies such as Amazon, Google, news and entertainment conglomerates, and others have announced plans to employ unmanned aircraft for a variety of commercial purposes. They are putting pressure on the FAA to expedite rules that allow continued growth of what is estimated to be an \$82 billion industry, creating 100,000 jobs. Six test sites mandated by Congress went operational this year, and the first commercial operations were approved for Alaska's North Slope. Two pending enforcement cases received media coverage after an administrative law judge ruled in one of them that the FAA did not have regulatory authority over small commercial drone operations. Regulations for small unmanned aircraft are due for release via a notice of proposed rule-making in December. Three states passed anti-drone bills, three were defeated and 12 more states have introduced similar legislation, the major concerns being privacy and fears of covert surveillance by law enforcement agencies. A

Rockets, unmanned planes dominate legal scene

by Douglas Marshall

The Legal Aspects Technical **Committee** fosters an understanding of legal areas unique to aerospace.



SpaceX's Falcon 9 v1.1.