Shocker: Northrop Grumman Beats SpaceX in Space
Rich Smith - Motley Fool

Two years ago, SpaceX announced an evolution in its business.
Elon Musk's pioneering space company -- famous primarily for its low-cost launch rockets -- landed a $149.2 million contract to build satellites for the Pentagon's Space Development Agency.

Building on its experience developing its own Starlink communications satellites, SpaceX was picked to work alongside established defense contractor and radio communications specialist L3Harris (NYSE: LHX) to build four Tranche 0 Tracking Layer satellites to track missile launches for the Department of Defense.

L3Harris was awarded $44.3 million more to do the exact same job. And in a related project, other companies have been hired to build Transport Layer satellites to facilitate communication among the Tracking Layer satellites, and between them and ground stations on Earth. And now, this entire system is taking a big leap higher in capability.

But it's leaving SpaceX stranded at the spaceport.

Getty Images Earth surrounded by an image representing a satellite network.
This dial goes to 36

Last week, the Space Development Agency (SDA) announced it is moving beyond the initial Tranche 0 contract to award more than $1.3 billion in Tranche 1 Tracking Layer (T1TL) satellites.

This expanded network of satellites will be better able to detect hostile missile launches and to track their flights and assist in targeting them for missile defense.

This award will cover 28 satellites, bringing the total number of missile tracking satellites in orbit to 36 by the time the new satellites are deployed, sometime after April 2025.

Two companies were named T1TL winners, with L3Harris winning $700 million to build 14 satellites, and a newcomer -- Northrop Grumman (NYSE: NOC) -- winning $617 million to build 14 more satellites.
"SDA is confident that selection of the L3 Harris and Northrop Grumman teams provides the best overall solution to accelerate delivery of a low-Earth orbit constellation with wide-field-of-view infrared sensors for a global missile warning and missile tracking capability in Tranche 1, on schedule," said the agency in a statement.

It's not clear why SpaceX didn't make the cut. But according to the agency, "Northrop Grumman brings decades of proven experience in missile detection, identification, tracking and communication systems" -- which at least explains why Northrop Grumman won, if not why SpaceX lost.

What it means for L3Harris and Northrop Grumman
Based on published figures, it appears that SDA is willing to pay anywhere from $44 million (to Northrop) to $50 million (to L3Harris) per T1TL satellite. And while there hasn't yet been confirmation that there will be a Tranche 2 (or 3, or 4) for this project, starting the labeling at 0 and ending as soon as they reached 1 would seem a weird way for SDA to number this project.

News service Inside Defense suggests that over time, tracking layer satellites might number more than 100, which implies a fully developed tracking system might be worth as much as $3.2 billion more to the winners.

And that's not all. Taking a page from the SpaceX Starlink playbook, SDA has designed its Tracking Layer to evolve over time. Satellites are designed for short lifespans, after which they will fall out of orbit and be replaced by newer, more efficient, more technologically robust satellites.

In fact, according to Air Force Magazine, the entire Tracking Layer system could turn over once every five years. Thus, whoever becomes an incumbent on this Tracking Layer project -- currently L3Harris and Northrop, but not SpaceX -- can expect to partake in as much as $5 billion in Pentagon spending every five years.
That basically makes this a $1 billion-a-year defense contract for winners.

What it means for SpaceX
Suffice it to say that losing out on the T1TL award is a big disappointment for SpaceX. That being said, not all is lost.

In theory at least, SpaceX might bid to do future Transport Layer satellite work instead. Right now, Lockheed Martin (NYSE: LMT), Northrop Grumman, and York Space Systems are the incumbents on the Transport Layer project, tasked with building some 146 separate satellites worth $2.1 billion in total.
(Lockheed won $187.5 million to build 10 Tranche 0 Transport Layer satellites and another $700 million to build 42 more Tranche 1 satellites; York was awarded $94

million for its first 10 satellites and $382 million for the next 42; Northrop -- again a late-comer -- won $692 million to build 42 satellites.)

Additionally, there appears to be about $1.2 billion still unaccounted for in the T1TL project -- funds budgeted to pay for four rocket launches to put the Tracking Layer satellites in orbit.

Given SpaceX's reputation as a low-cost launch provider, it's likely at least some of that launch money will flow to SpaceX.
Sure, it's not $5 billion -- but as consolation prizes go, $1.2 billion still wouldn't be half bad.