## Sun and Stars Align

Commercial and small school bus manufacturer Starcraft partners with Toyota's Hino Trucks to enter the Type C conventional market

By Ryan Gray

## The NEW Starcraft Conventional at a Glance

WITH PRODUCTION SCHEDULED TO BEGIN THIS FALL AND A PROTOTYPE NOT EXPECTED TO BE READY UNTIL THIS SPRING'S STATE SCHOOL TRANSPORTATION CONFERENCES, HERE'S A PRELIMINARY LOOK AT THE PARTNERSHIP:

- Diesel chassis powered by Hino Motors that runs on Selective Catalyst Reduction technology to achieve 2010 EPA regulations for 83 percent less NOx and 90 percent less particulate matter emissions
- All vehicle engineering performed out of Hino Trucks headquarters in Novi, Mich.
- The Type C will be "100 percent made to order," according to David Wright, GM of Starcraft Bus, and the bus will be "built from the ground up," meaning GPS and other electronic options will be available
- Average capacity of 66 to 72 passengers in 11 and 12 row configurations
- Wheelchair lift-equipped bus will be available immediately
- Ergonomic driver compartment with fewer controls on the steering wheel
- Buses are to be serviced by qualified technicians at all Starcraft dealerships
- No plans are being made public on an alternative fuel path, but Hino said it will launch this year "a range of hybrid vehicles that will join the American market with fourth generation hybrid technology proved in markets overseas"
- Reportedly, the company is currently testing a new outboard charge electric
- Starcraft has no plans at this time to manufacture a Type D school bus

WITH THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION still waiting to see a prototype, Starcraft Bus is pushing ahead with plans to unveil by this fall a line of new Type C conventional school buses, and in the process introducing the industry to a Japanese partner that draws its roots to before World War II.

Hino Trucks, a Toyota Group Company, officially entered a partnership with Starcraft Bus to bring a new look to the North American market, with full production expected in time for the start of the 2010-2011 school year.

Last year at this time, in the midst of the economic recession, the school transportation industry was chewing on data that showed bus production had fallen by three percent, bringing to light a total two-year production downturn of 20 percent. The only segment that saw growth during the 2007-2008 school bus manufacturing year, albeit by a mere fraction of a half percent, was that of the industry's bread and butter, conventional Type Cs.

Despite the fact that the total number of all types of school buses produced had fallen to 1996-1997 levels, Type Cs remain the most popular school bus type available to school districts and contractors alike, a fact not lost on Starcraft, the subsidiary of Forest River Inc., a holding of Warren Buffet's Berkshire Hathaway, which first entered the school bus industry one year ago with its new line of Type A small school buses. The move made sense, as the company had an established line of small white commercial buses and is the largest single purchaser of Ford diesel chassis.

Even before the 2009 bell rang, Starcraft had already dispatched representatives to various North American truck shows to specifically look for partners in the Type C chassis arena, said David Wright, GM of Starcraft Bus in Goshen, Ind.

"Hino was excited and interested in pursuing Type Cs," Wright said during the NAPT Trade Show in Louisville. "They were already wanting to go commercial. They're a global player with financial strength and brand recognition — a perfect partner for Berkshire Hathaway.

"Our dealers are really excited," Wright added. "Some are only currently Type A, so this gives them entry into the Type C market."

The bus body will be built on Hino's existing line of Class 6 diesel chassis at Starcraft's new 100,000 square-foot facility, which recently opened as a dedicated production line for the company's school bus lines. The chassis are already

being shipped to Goshen from Hino's truck plant in Williamstown, W.Va., meaning the new school bus would utilize SCR technology to meet 2010 EPA diesel engine regulations. And the school bus will be manufactured in a similar way to the company's current Type A line. That fact gave some in the school bus industry pause because Starcraft buses are lightweight with fiberglass roofs and rear ends and aluminum sidepanels and rubrails.

"Without speculating on what Ohio will permit, I am as interested as you to see what comes of their offering, and how each state approves or disapproves of the roof material for the Starcraft/Hino product," said Brian J. Whitta, a consultant at the Ohio Department of Education's Pupil Transportation Office. "I suspect there will be national debate about the roofing material used, and I am confident the Ohio School Bus Construction Standards Committee will partake in discussion about the matter."

Specifically, Mike Kenney, the bus specifications writing committee chair for the 2010 National Congress on School Transportation in May, said questions revolve around whether the new Starcraft Type C and its Reinforced Fiberglass Plastic roof and panels, or RFP, will pass federal side intrusion tests, which limits the amount of penetration into the school bus compartment to no more than 10 inches. Additionally, there can be no separation of the lapped panels or construction joints and no breaks, punctures or tears in the external panels.

Starcraft uses RFP in its Type A line, a feature Wright said was born from commercial dealer complaints about water leaks, another provision of the National School Bus Specifications and Standards manual. For example, the RFP roof is all one piece installed over the steel frame and roll cage.

A prototype conventional bus won't be ready until late spring or early summer, said Starcraft's Wright, in time for many of the state school transportation conferences and the STN EXPO in late July. NHTSA must first perform compliance testing on the Type C as it does for all new school bus manufacturers, but as of this writing, any such testing had yet to be scheduled. Even with body certification still up in the air, and many states like Ohio going above and beyond FMVSS requirements and national school bus industry guidelines, the company remains optimistic.

"We're also going to be offering a full steel roof, so it's not going to be an issue. It would be a no-charge option," Wright announced. "The one-piece [RFP roof] is going to be standard, and then there will be an option for the steel if the states require it."

But, Starcraft will first try to convince state school bus specifiers that the one-piece roof is as safe as its all-steel cousin, something that would certainly be helped along by full certification to the federal motor vehicle safety standards. Wright said the onepiece roof idea was first implemented on its commercial white buses after dealers complained about water leaks tied to the body rivets, a problem Wright said he has also heard from school bus customers. Another challenge will be convincing customers that vehicle service of the Hino chassis won't be a problem, but Wright added that most Starcraft dealers carry Hino.

"If they can meet side intrusion and rollover tests, they'll meet everyone else's standards," Kenney added.

Should Starcraft be successful, the industry at least will see its Type C options increase.

"I suppose all I can say is that competition in the Type C market is good for everyone," Ohio's Whitta added.