Modern Composite Structure Imaging Using Evisive Scan™ Technology
The Evisive Scan at left represents the entire Panel. The detail scan at right is a zoom of the 1”X 1” square indication which can be seen at approximately X=7, Y=4 in the left-hand image. Note that there are at least 5 additional, smaller indications which appear clearly in the higher resolution scan image at right.
Above left is a photograph of the coupon. Above right is the scan of this side of the coupon. Note that the defects beneath the round patches on the left and at the center are not simple round holes. The white sections of the black box represent the metal leading edge, and were not scanned.
Above left is a photo of the other side of the rotor coupon. Above right is one scan made from this side of the rotor. Note that, in addition to the intentionally embedded defects, the fiberglass cloth weave and internal structural members are clearly visible. The horizontal “banding” represent the intersection of Evisive Scan standing waves with the back surface of the coupon, and indicate thickness variation in the specimen.
In the photograph of the backing coupon at left, the translucent panel was back-illuminated to show the location of 15 intentionally embedded pieces of various pre-preg panel backing materials. The dozen or so round indications represent contamination or flaws which cannot be seen in the back-illuminated panel.
Advanced materials require advanced NDE methods.

Let Evisive, Inc. help you push your envelope.