

April 17, 2006

N06-03

Qualification Program Update

The National Center for Advanced Materials Performance at Wichita State University's National Institute for Aviation Research has chosen five resin systems for qualification. Each resin has three prepreg systems. They are:

• **Cytec 5215: (out-of autoclave system)**

T300 uni grade 190 with 35% RC, CPT approx. 7.5 mils
6K 5HS fabric with T650-36% RC, CPT approx. 14.9 mils
3K70PW fabric with T650-38% RC, CPT approx. 8.0 mils

• **Cytec 5250-4: (autoclave system)**

T40-800 uni grade 145 with 32% RC, CPT approx. 5.3 mils
6K 5HS fabric with T650-35% RC, CPT approx. 14.6 mils
3K70PW fabric with T650-36% RC, CPT approx. 7.8 mils

• **Hexcel 8552: (autoclave system)**

AS4 tape at 190 gsm 35% RC, CPT approx. 7.4 mils
IM7 tape at 190 gsm 35% RC, CPT approx. 7.3 mils
AS4 plain weave fabric at 193 gsm 38% RC, CPT approx. 7.95 mils

• **Advanced Composites Group (ACG) MTM45-1: (out-of autoclave system) ***

G30-500 193 gsm 3K plain weave fabric 36% RC
G30-500 145 gsm uni 32% RC
6781 S-2 glass 35% RC

• **Toray 2510 - AGATE Legacy Material** (involves minor additions to the existing database only)

** ACG equivalency and qualification will occur separately, but for Cytec and Hexcel, equivalency and qualification will be held concurrently.*

The materials were weighed for selection into the shared database based on the following criteria:

- Would you like to see this material qualified in the shared database?
- Are you or your sub-contractor willing to make test panels for this material?
- Do you have an immediate need for this material to be qualified?
- What material is your first choice for selection?

