RANS PAINTING AND CLEAR COATING

PAINTING ALUMINUM SURFACES

Aluminum surfaces such as belly pans, center covers, mating strips, etc. should be painted as below.
NOTE: *Always follow the manufacturer recommendations on ventilation and respiratory equipment.*

The RANS process is as follows:

1. "Scuff" the surfaces using medium Scotch-Brite to help the primer adhere.

2. Clean surfaces using lacquer thinner.

3. Apply two coats of self-etching primer (we use Dupont Variprime) according to the manufacturer recommendations.

4. Apply the paint chosen. It is recommended to use paint from the same manufacturer as the primer you applied to ensure chemical compatibility. If you are satisfied with the finish, painting can be the last step.

5. Clear coat if even more gloss and protection is desired (we use Dupont 72200S Clear coat for aluminum surfaces).

PAINTING PLASTIC SURFACES

Plastic surfaces such as wing fairings, cuff fairings, doors, etc. should be painted as below.
NOTE: *Always follow the manufacturer's recommendations on ventilation and respiratory equipment.*

The RANS process is as follows:

1. "Scuff" the surfaces using medium Scotch-Brite to help the primer adhere.

2. Clean surfaces using lacquer thinner.

3. RANS has found a primer is not necessary, as long as the surface is scuffed properly. A special "Plastic" primer may be applied if desired. Contact your paint manufacturer for details.

4. Apply the paint chosen. If you are satisfied with the finish, painting can be the last step.

PAINTING FIBERGLASS SURFACES

Fiberglass surfaces such as cowlings and windshield decks should be painted as below.
NOTE: *Always follow the manufacturer recommendations on ventilation and respiratory equipment.*

The RANS process is as follows:

1. Clean surfaces with Rubbing Alcohol to remove the fiberglass release agent.

2. Sand with 320 sandpaper.

3. Fill imperfections with Body Putty or Finishing Glaze. Sand smooth.

4. Apply 2 to 3 medium coats of primer (we use Dupont 1140S) according to the manufacturer recommendations.

5. Sand with 320 sandpaper.

6. Apply the paint chosen. It is recommended to use paint from the same manufacturer as the primer you applied to ensure chemical compatibility. If you are satisfied with the finish, painting can be the last step.

CLEAR COATING DACRON COVERED SURFACES

Wing, fuselage and tail surfaces will benefit greatly from the UV protection a clear coat of polyurethane can provide. A complete RANS clear coating video, including useful tips learned from many years of clear coating Dacron skins, is available from the RANS parts department. The basic method, briefly described below, is the "Deluxe System". Stop after step 6 for the "Standard System".
IMPORTANT: *Always follow the manufacturer recommendations on ventilation and respiratory equipment.*
NOTE: *Skins must be installed, tightened and shrunk before clear coating.*

The RANS process is as follows:

1. Clean the Dacron skins with lacquer thinner.

2. Remove any frayed or excess threads using a razor blade.

3. Remove any dust particles by using a high-pressure air nozzle (approximately 100psi) and a tack cloth.

4. Tape off Velcro gap seals. ***Hint:*** *Purchase Velcro and attach to the gap seal to protect from the clear coat.* Tape over zippers to allow future opening.

5. Apply an adhesion promoter (we use Dupont 222S Mid-coat adhesion promoter) according to the manufacturer recommendations.

6. Apply two coats of clear. Apply the second after the first has "tacked" according to manufacturer recommendations.
   In this step we use:
   3 parts Dupont 72200S Premier
   1 part Dupont 12305S Activator-Reducer
   1 part Dupont 12375S Low-temp Reducer*
   *(Reducer type will depend on temperature and humidity 12375S is for 75 degrees. If spray environment is closer to 95 degrees use 12395S. 12375S and 12395S may be mixed as needed for temperature. Reducer quantity will depend on the type of flow you desire. Use more to obtain thinner flow or less to have a slightly thicker flow).

   Let these two coats dry 24 hours.

7. Sand with 400 wet sand paper. Always use water when sanding. Do not sand the stitching of the fabric; instead use a Scotch-Brite pad to go around the stitches. Rinse, allow to dry thoroughly. Remove any residue with a tack-cloth.

8. Apply one or two more coats of clear.
   In this step we use:
   3 parts Dupont 72200S Premier
   1 part Dupont 12305S Activator-Reducer
   1 part Dupont 12375S Low-temp Reducer*

   Let these two coats dry 48 hours before handling.

- For even more information on clear coating, call the RANS parts dept. for information on the RANS clear coating process video.