Filename: TC Article 4 04082020

Art filename: TC Matrix Art byline: Lisa Turner

Hed: The Technical Counselor Visit: Human Factors

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Excerpt: "The best laid plans can be foiled by human factors."

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In the last article we talked about planning and goal setting. Even though these activities are common sense and logical, there are things that affect, and even upset, our rigorous planning. It's called human factors. This includes our level of preparation, things that we have no control over that upset the schedule, and our interaction with others. Here are some things to keep in mind as you make visits to builder projects.

You. Your actions as a TC are critical. The builder will see you as mentor and coach. They may hang on your every word. We tread a narrow path between advice and taking responsibility. If we go too far and tell the builder that everything looks perfect, they may misconstrue our words as an approval that causes them to not do the review themselves. On the other hand, we must provide the positive feedback that keeps the builder on track and pleased with progress.

In the technical role, you'll review progress and point out where things can be done better. A mix of honesty and tact is important. The builder needs to feel that you really care about helping them, and aren't looking down on them because they may lack the experience and skills for the tasks. They want to trust you; if you can gain this trust, they will listen to what you say.

As cheerleader, you'll offer reinforcing praise on the things that look good. You'll allow the builder to get their concerns out about the project and the progress, and you'll offer advice based on what you see. Builders will see your encouragement as positive and invigorating.

As an educator, you'll take some time on each visit to help the builder with items that stumped them, caused them to stop work, or things they don't understand. You're not expected to put on one on one classes in aircraft building of course, but you will be expected to provide an honest assessment of technical ability to the builder and point them to the right classes and learning materials. I'll talk more about that later in this series.

The builder. When you first show up to a build project, you'll have no idea what to expect. The first visit is the toughest for this reason. You'll need to do an evaluation after this first visit to establish your own goals about how much help the builder needs. Following the TC matrix will give you the roadmap, but the conditions of the road will change.



After a few visits to the project, when you know more about the builder's circumstances, try to assess what human factors could derail the project, and discuss these with the builder. They can include:

- Whether to involve the family
- Family conflicts
- A solo builder who wonders how they will get help when they need it
- Their assessment of their own abilities
- Concerns about the timeframe and goals

Add anything else you think might be an interference or a problem that could derail the project.

While it is not your job to be therapist when it comes to family matters, you can offer suggestions on how to involve family in the project. In one situation that I encountered as a TC, we solved two problems at once by getting a reluctant spouse involved in the project. They ended up enjoying the time spent on the airplane so much that they completely changed their opinion of the entire undertaking.

Solo builders also report establishing great relationships with neighbors who dropped over to help flip a wing or help move the fuselage.

The bottom line on dealing with the human factors side of building is to listen very carefully to the builder, especially on the first and second visit as they build trust with you. By listening more than talking, the TC will discover some of the hidden pain points and human factors that could derail the project. Then be creative and positive as you discuss solutions.