Part Four

– Fun things you can do with an interest in aviation –

Learning outcomes – Upon completion of PART FOUR, the learner should be aware that:

- Many hands-on alternatives to drugs exist that are related to aviation & flight.
- Staying sober & drug free are absolutely necessary even when building and flying a radio control (R/C) airplane.
- A hobby shop has some wonderful projects and activities that can interest a young mind.
- Building models can help build self-esteem.
- One of the ways to study the rich history of aerospace is in model-building.
- R/C flying helps develop pilot skills and instills situational awareness.
- Many radio control flying skills are directly applicable to the flight of a real airplane.
- Radio control simulators have a direct application to the flying of actual R/C models. This can amount to a considerable amount of money saved. One $250 simulator can train a pilot on how not to crash a $2500 model airplane.
- Air shows can excite aviation enthusiasts of all ages.
- Air show audiences experience the glamour and glory of airpower.

Important terms

Air Show – an event that features airplanes, special flying skills, military aerobatics, and aviation-related activities (Some airshows are called "Fly-Ins." These are gatherings of builders of custom aircraft, aircraft by the same manufacturer, warbirds, or models of airplanes.

Diecast model – a pre-built metal model replica of an airplane

Flight Sim – an abbreviation for "flight simulator" (A Flight Sim allows the hobbyist to fly a computer or electronic control box that gives the sensation that one is actually flying a real aircraft or a radio-controlled model.)

IPMS – the International Plastic Model Society (This is an organization of model-builders who strive to achieve extreme authenticity in all forms of replication.)

Kit – a collection of parts that, when assembled, produce a model

Kit Plane – an actual airplane that was made from pre-formed parts

Model – a replica of a full-scale vehicle which is usually made of wood or plastic

Park Flyer – a model airplane or helicopter that is designed to be flown in a very small area like a park, back yard or even a parking lot (Some park flyers can be flown indoors.)

Radio-Control Models – models that have on-board power units, such as gas engines, or electric motors, and are controlled from a distance by a person and a radio (The radio is a transmitter that operates on a dedicated frequency that is different from others in the vicinity. The radio signals from the transmitter operate servos in the aircraft that move the control surfaces.)

Scale – the exact measurements of an airplane, car, boat, or motorcycle, and then divides those numbers by a fraction which results in a "scale" model (For example, a 1/24th scale model means that the actual vehicle is 24 times larger than the model. Most model airplanes are in the 1/32 nd, 1/48th, and 1/72nd scale ranges.)

Stand-off scale – a model that is not a replication, but more of toy that "sort of" looks like the actual vehicle.

War-Birds – actual aircraft that served its country during a period of wartime (Model warbirds are replicas of actual warplanes.)

Presentation

Attention: There are other, better things to do than drugs. One of the fascinating places for someone interested in airplanes is a hobby shop. After carefully building a replica of a favorite airplane, a young boy or girl can hang it from the ceiling of a bedroom or place it on a study desk and admire it for years. People have even returned home after years of being away, and a model airplane is one of the first things they will pick up when they visit their childhood bedroom. Comments like, "Ah, I remember when I built this. I always loved the P-51 and my parents always said what great job I did on it." This little treasure will bring back fond memories, and, in many cases, model-building can become a life-long hobby; it becomes a time to just sit, think, and create. Those are some of life's quality moments.

Motivation: Hobbies are also a way of getting students, cadets and teachers away from television and video games. It is a way of making the mind focus on creating something special. Tell your students to seek out a hobby club and very often they will find others with the same common interests. These clubs are, almost without exception, good, drug-free environments, and, in many cases, a young person will find a nice bond with a father or grandfather-like mentor. This kind of interaction can have a very good self-esteem-building outcome.

As part of the course, the instructor might get the students to join in a field experience to a hobby shop. What the instructor is doing is opening the door to a great alternative to drugs. When the whole group goes to a hobby shop, some for the very first time, it is an "awakening." When cadets, teachers, AEOs and others who attend these workshops or classes get together they will very often pair up and go to areas of the hobby shop that is of a common interest, such as airplanes, R/C models and parts, and model-building kits. This can result in a very positive bonding-effect within class participants.

Overview: The Instructor should go over each of the **SUBJECT HEADINGS** and point out the relevance they have to the overall theme of PART FOUR. These "Headings" were included so that an Instructor can set aside enough time needed to cover a subject.

The instructor should plan the lesson around these Subject Headings. Part Four has 10 Subject Headings. Some are quite short, while others are more detailed and lengthy. If LET'S GO FLYING is going to be covered in one workshop or class setting, these subject headings can be grouped around certain blocks of time.

Part Four- Drug Issue:

1. There are many fun aviation-related alternatives to drugs!

Lesson / recommended methodology

1. Go over the "presentation" section to begin.
2. Explain what a die-cast model is and how it is different from a kit model.
3. Discuss the benefits of model building and of flying the models either with an electric or gas-powered engine or with radio controls.
4. If the instructor has the funds, it would be an excellent activity to bring a Park Flyer model to the class. These can easily be disassembled and then re-assembled much like Major Grell did in the text. (Or, find a local radio control airplane club, via the internet or at your local hobby shop, to demonstrate a flying model.)
5. The next exciting activity would be to actually fly the Park Flyer during lunch or after the class.
6. Plan a hobby shop visit, and have the owner demonstrate one of the Great Planes Radio Control flight simulators. They may be too expensive for the instructor to buy, but during the visit, the class can see its operation.
7. If students are going to build models, make sure they ask hobby-shop workers (who are usually avid hobbyists) which paints and glues are the safest for conditions where the model will be built (basement, garage, bedroom, etc.) Also, it is very important to know which paints and glues work on what materials; on plastics, woods and metal.
8. Tell students to read the instructions on the glue containers. Following the instructions is very important, especially when using high-speed glues.
9. Caution students concerning glues and paints. Most of the glues are no longer a "sniff-problem," however, the Super Glues do dry very quickly and can bond fingers together.
10. Discuss the history of the J3 Piper Cub and/or he warbirds as noted in the book.
11. Get students to discuss air shows they may have attended. If they have pictures of air shows, it is fun to have them pass them around for other to share.
12. Point out that many air shows have CAP volunteers to help with crowd control. They play a vital role to the safety of the air show and it also gives the public a chance to see the cadet program in operation.