



## **How to Organize a Local Formation Clinic**

Formation clinics are typically initiated by a group of pilots that desire to obtain initial, additional or more advanced formation training. Clinics are most efficiently organized by interaction between someone willing to serve as a Local Clinic Coordinator working with the *Stearman FLIGHT* Clinic Chairman. While procedures may be adapted to accommodate site-specific conditions, this document will provide some guidelines that may prove useful. Expanded discussion on each step in the planning process follows the initial list. Much of the work of organizing a clinic can be done by telephone or email. By sharing expenses the per-pilot cost of a clinic can be kept to a minimum.

### **PLANNING THE CLINIC**

1. Ascertain the number of pilots interested in attending.
2. Select a date, or preferably dates, that are workable.
3. Select a suitable, convenient airport.
4. Contact the *Stearman FLIGHT* Clinic Chairman to determine the availability of Instructors and Check Pilots.
5. Set the date, estimate the pro-rata clinic cost and collect clinic registration forms and deposits.
6. Make transportation and lodging arrangements for out-of-town instructors.
7. Ensure each trainee obtains a *Stearman FLIGHT* membership and Formation Manual.
8. Communicate regularly with those planning to attend.

#### **1. ASCERTAIN THE NUMBER OF PILOTS INTERESTED IN ATTENDING.**

Talk to pilots in your area to find out how many are interested in undertaking a training program to learn standardized formation procedures and safe operating techniques. Explain to potentially interested pilots that it *will* require a time and monetary commitment. Past experience has shown that those who have to be “talked into” signing up for a clinic probably aren’t really that interested.

#### **Clinic Size**

Clinics can include any number of pilots. Two trainees, two aircraft, and two instructors, meeting at someone’s hangar for a half-day (or evening) ground school then flying several

short training sorties constitutes a ‘clinic.’ A more typical local clinic might be four or six of each. The only factors limiting the size are the number of interested pilots and the number of available instructors.

### **Clinic Duration**

A clinic can be of any duration, from one day on up. Unless the trainees and instructors live in the same area, the best utilization of time and resources probably dictates a Thursday evening ground school session, followed by training flights on Friday, Saturday and Sunday morning.

### **Trainees Per Instructor Ratio**

For the maximum training benefit it’s best to keep the trainees per instructor ratio near 1:1. Having more trainees than instructors is certainly acceptable as long as the number doesn’t get excessive. Just remember, the more trainees per instructor, the less each trainee will get to fly.

### **Minimum Pilot Qualifications**

For a Wingman rating – the first level of formation qualification – a trainee must possess at least:

- A Private Pilot’s License.
- A current 3<sup>rd</sup> class medical certificate, or higher.
- A minimum of 200 hours total flight time – Two-ship wingman
- A minimum of 350 hours total flight time - Four-ship wingman (250 hours with a Commercial certificate)

### **Aircraft Requirements**

The Stearman to be used must:

- Be in good mechanical repair.
- Have a valid Airworthiness Certificate.
- Have a current Annual.
- Have dual controls.
- Have a two-way radio.
- Have an operable interphone – preferably with instructor-seat radio-transmit capability (Note: Little training can take place if the interphone does not allow free, intelligible, and unrestricted communication between the trainee and the instructor. For safety reasons, instructors simply will not train in an aircraft that has a poor quality interphone).
- Have a headset provided for the instructor.

## Other Considerations

- Although not required by the FAA or *Stearman FLIGHT*, wearing parachutes during formation flight is encouraged. Most instructors will not instruct without having a parachute available to them. Others will bring their own chute in lieu of having to borrow one. Check with the instructors in advance to see what they require.
- The aircraft owner must carry liability insurance.
- Each participant will be required to sign a “Hold Harmless” agreement, waiving the liability of the other participants (trainees, instructors, and Check pilots).

## 2. SELECT A DATE OR PREFERABLY DATES THAT ARE WORKABLE.

Prior to contacting *Stearman FLIGHT* determine dates that are workable for pilots committed to attending the clinic. The more dates available, the less iterations required to match up instructor and trainee schedules.

## 3. SELECT A SUITABLE AIRPORT.

The airport should have:

- A sufficiently long and wide runway to accommodate the most inexperienced trainee.
- Adequate ramp space and tie-downs.
- Fuel available.
- Ground school meeting place (hangar, office, meeting room) with:
  - Adequate seating to accommodate all attending.
  - Visual aids (not required, but nice to have):
    - Blackboard, dry-erase board, or anything else suitable for drawing.
    - Small aircraft models for demonstration (preferably of the type to be used).
- Briefing rooms (again, not required but nice to have) convenient to the flight line for conducting pre and post-flight briefings.
- Conveniently located hotels and restaurants.

## 4. CONTACT THE STEARMAN FLIGHT CLINIC CHAIRMAN.

With information regarding the number of trainees anticipated, the clinic location and available dates, the *Stearman FLIGHT* Clinic Chairman will be able to initiate the process of making preliminary arrangements and determine the approximate expenses required for transportation and meals and lodging for instructors and other clinic costs.

Instructors and Check Pilots are dedicated individuals (many are professional aviators) who help out at clinics for two basic reasons: First and foremost, they like to fly formation. Second, they feel that it’s an important contribution to aviation safety. They are willing to take time away from their families and other personal activities to come and instruct at your

clinic. Out of common courtesy, when planning a clinic do your utmost to make sure you have a sufficient number of pilots **committed** to attend before contacting the *Stearman FLIGHT* Clinic Chairman. None of those involved like to rearrange their work and free-time schedules to attend a clinic, only to find out that it fell through at the last minute because the trainees weren't committed to coming and began to drop out.

### **What Do Instructors Charge?**

**Nothing** – although they are giving their time for free, they will probably expect to attend your clinic at no out-of-pocket cost to themselves, including transportation, meals and lodging. The *Stearman FLIGHT* Clinic Chairman will attempt to make arrangements that maximize training opportunity and minimize expenses.

### **5. SET THE DATE, ESTIMATE THE PRO-RATA CLINIC COST AND COLLECT CLINIC REGISTRATION FORMS AND DEPOSITS.**

Sometimes the date will fall into place easily, other times potential dates will have to go back and forth several times before a mutually available date can be found. If you've planned a large clinic and are having trouble finding a date when enough instructors are available, it might be necessary to scale back the size of the clinic. Obviously, a smaller clinic, or even two clinics a couple of months apart, is preferable to no clinic at all.

In selecting a clinic date it is important to consider other aviation functions or fly-ins that might conflict with your proposed clinic. If you pick the same date as a popular fly-in you might have trouble getting commitments from others. The farther in advance you pick the date, the easier it is to accommodate everyone's schedule. Planning a spring or summer clinic in December or January is not too early. Realize that your group might not be the only one trying to schedule a clinic. The sooner you start planning, the more options you will have finding a date acceptable to trainees and instructors alike.

Once the Local Clinic Coordinator and the *Stearman FLIGHT* Clinic Chairman set the date, they can work together to determine the cost of travel, lodging and other clinic costs. These costs can then be used to determine the appropriate deposit to be obtained from each participant.

A clinic where all the trainees and instructors live and fly in the local area will have very little cost. When out-of-town instructors are needed, the expense for their travel and accommodations will enter into the equation. Those instructors who are airline pilots may be able to fly to your clinic at no cost by utilizing their pass or cockpit jumpseat privileges. Otherwise instructors will need a prepaid, round-trip ticket.

On some occasions an instructor may live reasonably near the clinic location and wish to fly his own airplane there. In that case his fuel cost should be covered as a clinic expense.

## **Deposits**

Past experience has shown that the best way to determine who is serious about attending a clinic is to charge each trainee that signs up a deposit in advance, due with the clinic registration form in order to lock in a reservation. Depending upon the lead time, the deposit may be refundable up to 60 days prior to the clinic – after which the deposit will be non-refundable for anyone dropping out, unless a replacement can be found to fill the empty slot.

Requiring a deposit accomplishes two things: It gives the organizer a good idea of how many trainees are serious about attending – thus a good idea about how many instructors to book. Perhaps more importantly, it ensures that clinic costs are covered, and that those pilots who ultimately attend are not financially burdened by a last minute cancellation.

Typically the deposit will be approximately \$50 per person more than the anticipated pro rata clinic cost. This will serve to cover any unexpected expenses that might arise. Those who attend the clinic will normally receive a pro rata refund of any excess deposits.

No travel arrangements will be made for instructors until sufficient deposits have been collected to fund the travel costs.

## **Clinic Registration Forms**

A Clinic Registration Form will be completed by each trainee to provide a brief synopsis of his or her experience level, ratings, prior formation experience, etc. This may be done via email. This allows the *Stearman FLIGHT* Clinic Chairman and instructors to plan the training sorties to make maximum use of the time and resources available. If there are particular trainees that would like to be paired together, this is the time to make such a request.

### **6. MAKE TRANSPORTATION AND LODGING ARRANGEMENTS FOR OUT-OF-TOWN INSTRUCTORS.**

After sufficient deposits are in hand, travel arrangements for the instructors will be made by the *Stearman FLIGHT* Clinic Chairman. The Local Clinic Coordinator will assist with arranging for local transportation and lodging for out-of-town instructors and trainees. Lodging for instructors may need to include the night before the clinic and the night after, depending upon flight availability and timing.

### **7. ENSURE EACH TRAINEE OBTAINS A STEARMAN FLIGHT MEMBERSHIP AND FORMATION MANUAL.**

A ground school will be conducted at the beginning of the clinic. Each trainee must be a current member of *Stearman FLIGHT*, purchase a copy of the *Stearman FLIGHT* Formation Manual and have a good basic knowledge of the material included, before the clinic. Do not wait until the last minute to obtain and review the manual.

Information on how to join *Stearman FLIGHT* and obtain a copy of the Formation Manual are presented at the end of this document.

## **8. COMMUNICATE REGULARLY WITH THOSE PLANNING TO ATTEND.**

Both the Local Clinic Coordinator and the *Stearman FLIGHT* Clinic Chairman will communicate periodically with those registered for the clinic. Lack of communication with participants can result in poor clinic attendance. Keep everyone up to speed on what's going on. When those planning to attend don't hear anything about the clinic for weeks or months they may begin to wonder if it's going to take place – or it slips from their mind entirely. Just a short note, email, or phone call will suffice to remind them that everything is set and ready to go.

Follow-up to make sure that each trainee has obtained the formation manual. If possible, it is recommended that the Local Clinic Coordinator plan a short study session or two with the other trainees to review the content of the manual, terminology and hand signals.

## **MISCELLANEOUS INFORMATION**

### **Training Flights**

Prior to the commencement of training flights a three to four hour ground school will be conducted and a written test given – typically the night before the flying begins. Trainees are expected to have a thorough working knowledge of the formation manual *prior to* attending the clinic. They should know the material in the books and be ready for the test. Anyone who arrives unprepared will detract from the progress the entire group could otherwise make.

After completion of ground school, pilots will be paired with instructors and will spend the remainder of the clinic flying. A thorough pre-flight brief will precede each flight, with the instructor discussing each maneuver or formation to be flown. Each training sortie will be a two-ship flight of relatively short duration – about twenty to thirty minutes long. At the completion of each flight the instructors will hold a thorough debrief with the trainees, discussing the flight in detail.

The number of sorties flown per day by each trainee will depend on several factors, including the number of trainees that must be accommodated, the number of instructors, the time available, amount of daylight, fatigue, and of course, weather. Typically with new students, an instructor will be able to conduct four flights per day.

### **Use of a Dedicated Lead or Wing Pilot**

When two students are paired for training (For instance both working on 2-Ship Wing qualification, or one working on 2-Ship Lead and the other training for 2-Ship Wing) the training is complementary. However, if such an arrangement is not available and an already

qualified pilot fills a “dedicated” position (lead or wing) to facilitate training, it is customary for the pilot receiving the training to compensate the pilot flying the “dedicated” position for his or her fuel.

### **Weather Considerations**

There are no guarantees when dealing with Mother Nature. Scheduling the clinic during a time of typically good weather for the locale will lessen the chances that it will be affected by bad weather.

What happens if the weather does turn bad? If everyone is already in place and the weather turns bad, flying will simply take place on a reduced schedule, as the inclement weather allows.

### **FAST Card**

The goal of *Stearman* **FLIGHT** is to promote formation safety. This is accomplished through training and standardization, following the *Stearman* **FLIGHT** training syllabus. For this reason, there are no shortcuts through the program – nor should there be, since quality training and the accumulation of experience takes time. Anyone simply interested in cursory training and a quick sign-off just to get a FAST card is probably getting involved with the wrong program.

After sufficient training, and upon reaching an acceptable level of proficiency, the trainee’s instructor will recommend him or her for a Wingman check ride. This may or may not happen at the first clinic the pilot attends. How fast one attains proficiency is affected by many factors, including general pilot experience, prior formation experience, how well the pilot adapts to formation flying and, of course, how much flying is done at the clinic.

After demonstrating competency during a check ride, the beginning trainee will be Wingman qualified and a FAST card will result. As in most aspects of aviation, being “qualified” could more appropriately be thought of as having a license to practice, hone learned skills, and gain experience.

If the pilots in your area are interested in *safe* formation flying, pursuing the training is an excellent idea. They will find formation training not only valuable, but rewarding.

### **Ongoing Training**

*Stearman* **FLIGHT** formation training is structured in a building block fashion to develop ever-increasing formation skills and assign ever-increasing responsibility to the pilot. The first training step, 2-Ship Wingman, is the position in which all the basic elements of formation flight are introduced, learned and practiced. Along the way, each pilot is periodically exposed to the 2-Ship Lead role since it obviously takes two aircraft to make a formation and somebody has to lead while the other pilot is training as a Wingman.



Throughout the training, at every stage, the foundation is carefully being laid for eventually flying 2-Ship Lead, 4-Ship Wingman, and ultimately 4-Ship Lead.

Once qualified as a 2-Ship Wingman the pilot is required to acquire experience in that position before he can become a 2-Ship Lead. The next qualification step is normally 2-Ship Lead. Once your group reaches the point of having *two* qualified leads, training begins to become self-sustaining, needing a Check Pilot only for check rides. If the pilot desires to progress beyond 2-Ship Lead, to 4-Ship Wingman, and eventually to 4-Ship Lead, he will undergo further training. 4-Ship qualification gets a little more involved because you may initially need four instructors. However, once you get some 4-Ship Leads qualified, they can begin to instruct the others.

### **Check Rides**

Qualification rides are given by **Stearman FLIGHT** Check Pilots. Check Pilot is not considered an additional or advanced rating. It is a status held by a limited number of experienced **Stearman FLIGHT** pilots, strategically scattered about the country, whose primary function is to conduct check rides (naturally, they can also instruct when needed). **Stearman FLIGHT** purposefully keeps the number of Check Pilots somewhat limited in order to maintain a high degree of standardization – the key to formation safety.

## **STEARMAN FLIGHT CONTACT INFORMATION**

### **Membership Contact**

**Tonya Hodson**

224 Tanglewood

Marion, Kansas 66861

(620) 382-7600 Cell

[thodson744@att.net](mailto:thodson744@att.net)

### **Clinic Chairman**

**Carey Hardin**

Post Office Box 1328

Starkville, Mississippi 39760

(662) 323-8000 Office

(662) 312-8300 Cell

(662) 323-0088 Home

[cfh@clearwaterconsultants.com](mailto:cfh@clearwaterconsultants.com)