

# **RED THUNDER**

**Air Show Team**

## **Announcer Packet & Press Information**



For additional information visit our website at  
[www.redthunder.us](http://www.redthunder.us)

Or call 931-260-6871

ANNOUNCER: Watch for timing and wing it (pun intended) where you need to. You will find inserted a basic description of each maneuver in order to give you situational orientation during the show. Additionally, find an accurate bio for each pilot and information about our airplanes inserted in the back. The rest of the below script is written with huge creative license – some accurate and some inserted to entertain. **Have fun with it and help us please the crowd.**

### MANEUVER #1: **SIX SHIP DELTA**

Diving in from the right is the Red Thunder Six Ship Delta. Fifty Four cylinders pumping out over 2000 horse power led by Tim Williams of Dadeville Alabama.

- As the Delta passes show center, Jimmy Fordham, Robert Langford, and Bill Walker will pull vertical out of the formation and chase each other into a **“CUBAN EIGHT DOGFIGHT”**.
- From an in-trail position, Robert and Bill dive at Jimmy who will escape by again pulling vertical in the second half of the Cuban Eight.
- As Jimmy’s plane slows to a near stall at the top, Robert and Bill will almost catch him, but only long enough to see him speed away as his nose starts down and he rolls to an upright position.

## MANEUVER #2: SWITCHBLADE

As the three dogfighters chase each other in a ninety degree turn out from show center, look overhead and see Tim Williams leading Shane Golden, and BJ Kennamore, flying “nose to tail”.

- Watch closely as the airplanes suddenly break in different directions as they perform the “**RED THUNDER SWITCHBLADE**”

As BJ rockets up and away, Tim and Shane are turning back into show center going “head to head” in much the same way as WWII fighter pilots found themselves facing their adversary. As Tim turns away, Shane, as if he were in the heat of battle, banks and pulls hard to get the advantage. Now, BJ joins the chase from his position high and left.

## MANEUVER #3: BOMB BURST

Look left as Jimmy, Robert and Bill have rejoined and are diving their airplanes at maximum speed in a three ship “Vic” formation. As Jimmy pulls vertical loading up to about four G’s, Robert and Bill stay in close formation and concentrate only on “leads” aircraft. This is where trust in your flight lead and wingman are paramount.

- After reaching the top of the loop, all three will roll and pull in different directions in the “**RED THUNDER BOMB BURST.**”

#### MANEUVER #4: **OPPOSING LOOP & REJOIN**

As Robert pulls and rolls away, Bill and Jimmy keep pulling into separate loops. As they become inverted they are looking nose to nose at each other, but instead of passing one another while inverted, their nose will drop and they will each complete "**OPPOSING LOOPS**".

Now, they again continue to pull vertical. Only this time as they pass through inverted they will  $\frac{1}{2}$  roll and dive directly towards each other for their own version of an "**OPPOSING REJOIN**".

- As they approach each other, they will each pull and skyrocket straight up with each airplane doing a quarter roll on the way.
- As they climb their airplanes dissipate energy and just before their planes stall and fall from the sky, they pull the stick hard into their gut, put their airplanes onto their backs and rocket down towards the ground gaining over 200 knots.
- They each do another quarter roll as Bill chases Jimmy away to the left.

#### MANEUVER #5: **ECHELON PASS AND LOOP**

While Jimmy and Bill climb out to the left, get your cameras ready because here comes Tim, leading Shane and BJ in a high speed echelon banana pass.

Hard on their heels diving in from the left, watch as "Lefty" pulls vertical into a big "**BARNSTORMERS LOOP**." Watch as he rolls the airplane on top of the loop going from inverted to inverted, dives back into show center, then rolls again as he exits the box.

## MANEUVER #6: **HEART**

Diving in from your left, you can see Jimmy and Bill in a two-ship dagger formation.

- As each airplane reaches vertical, Bill makes the call for “smoke on” then separates by pushing the stick hard away. He then rolls on his back and pulls back down toward show center while Jimmy continues his pull from the top of his loop.
- Jimmy and Bill dive, then pass within 25 feet of each other as they leave the “**RED THUNDER HEART**”

Jimmy leaves right, Bill goes vertical again this time performing a ½ Cuban eight to follow Jimmy in his beautiful YAK-52.

## MANEUVER #7: **BREAK AND REJOIN**

As Bill exits to the right, Tim brings in the three ship in a tight, precise ESCHELON RIGHT formation. This formation looks simple, but is difficult to perform especially at an Airshow. Any movement or misalignment is immediately visible to the crowd. Let’s watch to see if they get it right.

- At show center the three planes perform what appears to be a standard fighter aircraft **“BREAK TO LAND”**

Instead of landing they turn away from the crowd and demonstrate a **RAPID REJOIN** from extended trail.

(Announcer may explain the significance of a military break to land and the rejoin maneuver; rejoin may take about 30 seconds).

## MANEUVER #8: 3 SHIP LOOP AND TAIL CHASE

As the three ship "Vic" exit to the right of the crowd, Jimmy, Robert, and Bill have joined up and are diving in from the right for the 3-ship "FORMATION BARNSTORMERS LOOP".

- As they come back to the bottom of the loop they will again pull up and into a "DOGFIGHTING TAIL CHASE".
- This time Jimmy does a complete loop with Robert and Bill in hot pursuit.
- Out of the loop, Jimmy makes a chandelle wingover turn back towards to crowd and does a big beautiful "RED THUNDER BARRELL ROLL" with Robert and Bill close behind.
- As the three dogfighters come out of the barrel roll the three ship formation lead by Tim Williams comes across the show line left from behind the crowd.
- Jimmy, Robert, and Bill see the formation in front of them and they maneuver to join up forming the "RED THUNDER SIX SHIP DELTA".

(The entire formation continues its right turn until it is coming back toward the crowd at 1000 ft.)

## MANEUVER #9 (last): STARBURST

As the Delta formation approaches, the smoke comes on and all six planes break in six different directions performing the "RED THUNDER STARBURST".

RED THUNDER PRESS RELEASE

## **“RED THUNDER” AERIAL DEMONSTRATION TEAM**

Big smoke, wonderful sounds of big radial engine airplanes and the thrills of an air show. All of this plus precision close formation aerobatics and warbird demonstrations when the Red Thunder Air Show Team performs at your show.

Red Thunder will demonstrate a variety of maneuvers that will include a mix of precision formation flying and exciting solo and formation aerobatic routines. You will enjoy the ballet of aerial precision and you will be stunned by the dominance of these former eastern block airplanes. Some of the aerial demonstrated by the Red Thunder Pilots are a formation “Bomburst,” “Heart in the sky,” “Dogfighting,” and their signature “Delta Diamond Starburst.” The wing tip distance between the aircraft during these demonstrations is only about 3 to 4 feet. Regardless of how slow or how fast and airplane may be, anytime a pilot places his wingtip within 3 of another airplane, it requires extreme concentration, skill and hundreds of hours of practice.

“Red Thunder” Team airplanes feature the Russian YAK-52 and the Chinese Nanchang CJ-6. Tim Williams of Dadeville, AL is the Team Leader and offered this: “Our team offers people an opportunity to see these stunning Red Star airplanes up close and personal. A chance to see airplanes that only a few years ago would have been impossible here in the United States.” Today there are around 500 Russian Yaks and Chinese airplanes in the U.S. When asked about his remarkable airplane, Solo aerobatic pilot Jimmy Fordham of Monroe, LA answered “I fly the YAK-52, formally used by the Soviet Air Force to train fighter pilots; it’s an airplane that turns heads at every airport. It has fantastic maneuvering qualities and will turn on a dime.”

Team “Red Thunder” airplanes are flown by pilots with varying backgrounds including former military pilots, military helicopter pilots, commercial pilots flying for the airlines and civilian trained pilots. They love to talk about their airplanes, so please make a point to meet, and talk with them.

Visit Red Thunder at [www.redthunder.us](http://www.redthunder.us)

## **Red Thunder Eastern Block Airplanes:**

Even a novice to airplanes, when looking at one of these will recognize that this is a tough rugged aircraft. Originally used for aerobatic training off of unimproved airstrips, The Yak 52 is powered by a nine-cylinder Russian 360 HP or 400 HP radial engine. It is fully aerobatic and can fly inverted for up to two minutes. The Yak 52 can handle G loads of +7, -5 G's. Its top speed is 260 MPH. The Yakovlev Design Bureau, Moscow, Russia, designed the Yak 52 during the mid 1970s and was first delivered to the Russian military in late 1978. They were manufactured in Romania and distributed throughout the Soviet Union where they were used as trainers for Soviet pilots from 1979 until 1991.

At the end of 1991, political and economic conditions in Russia made these aircraft available to private customers in the U.S. and throughout the world. They were attracted by the aerobatic performance of the aircraft, its warbird appearance, and by its reputation as the aircraft the "Red Army Pilots" were trained on.

These planes are still being produced with variations. Some have more horsepower, larger fuel tanks, a three blade propeller, and tail wheels.

The Chinese Nanchang CJ6 aircraft are not quite as aerobatic as the Yak, but are larger and faster. The CJ6A is powered by a Chinese nine-cylinder 285 HP radial engine. The CJ6A is also aerobatic and can handle G loads of +6.5, -3 G's. Its top speed is 230 miles per hour. The first CJ6 was delivered to the Chinese military in the mid-1960s.

Both aircraft served as excellent trainers for military pilots transitioning into jets or learning advanced aerobatic maneuvers.

Red Thunder Pilots are all FAST rated Lead Pilots of The RedStar Pilots Association, a Federal Non Profit 501(c)(3) organization dedicated to the preservation and operation of such radial engine aircraft as the Nanchang CJ-6, Yak 52/50, and L-39/29 Jets. The RPA is a recognized leader in the FAA civil formation credential program and author of the National Formation Training Manual and manages the RedStars Mass Formation Program.

## Visual differences between the CJ-6 and the YAK.



### The Chinese Nanchang CJ-6

Note the square vertical fin and “bent” wing of the CJ. Still in use as a primary trainer in the Chinese Air Force to train their fighter pilots.

The YAK-52 and the YAK-52 TW have a straight wing and rounded vertical tail. Used in Russia and Romania as an aerobatic trainer.



### The YAK-52 TW



The “Straight” YAK-52 (bottom) and the YAK-50 (single seat variant)



YAK-52 on left and CJ-6 on right. Note the difference in wings. Also note the CJ main landing gear retracts fully into the belly as does a YAK-52TW. The “Straight” YAK main landing gear remains partially extended although retracted.

## **TEAM RED THUNDER Pilot Bios:**

### **Leading RED THUNDER today is**

*THUNDER LEAD:* Tim “TW” Williams started flying in the mid 80's and joined the war bird ranks 5 years ago. After purchasing a new Yak 52TW and joining the Red Star Pilots Association (a group interested in eastern bloc aircraft and formation flying) formation flying has become his passion. Now, having over 3500 flying hours, and over 500 formation hours, Tim is a member of the Red Thunder Air Show Team flying both lead and #3 positions. Tim and his family live on beautiful Lake Martin in Alabama.

*NUMBER 2:* Shane “Sparky” Golden’s general aviation career began after graduating from The Citadel with a BS in Electrical Engineering. “Sparky” started flying formation in 2004 and has logged well over 1000 hours in GA aircraft, with nearly half of that time in tight, air show-level formations. Shane is a FAST lead pilot and the Regional Director with the Red Star Pilot’s Association. Shane works as a Professional Electrical Engineer and lives in Leesville, SC with his wife Scarlette.

*NUMBER 3:* BJ “Buzz Job” Kennamore grew up in “Music City” Nashville, TN., He started a speed shop business while still in high school that later became his very successful life’s work. In 1980 he took his first flying lesson and has since accumulated over 4000 flight hours in various aircraft and has even developed his own airpark called Windward Pointe Aviation Estates Airpark. Now retired from the top fuel and funny car auto racing business he keeps fantastically busy by continuing to build his aviation experience and ratings. As Red Thunder’s Maintenance Officer and one of our lead pilots, we rely on his expertise constantly. He is proud of his service to our nation as a Marine and salutes all who serve. BJ flies #7, a Nanchang CJ-6A. He and his beautiful bride Charlotte, also an accomplished pilot, live in Northern Alabama.

*NUMBER 4: (Lead Acro):* Jimmy “Mr. Clean” Fordham started flying at age 14. By age 18 he had obtained his commercial, instrument, multiengine, seaplane, and flight instructor ratings. In 1975 he graduated from Northeast Louisiana University with a BS degree in aviation. In the late 1970’s he flew air shows in a Pitts Special, Midget Mustang and Schweitzer 126 Sailplane. Jimmy has flown as a corporate and charter pilot on various multiengine, Lear Jet, and Falcon 20 aircraft and has worked for a major airline since 1984. Jimmy currently flies as captain on the Airbus A330. He has also worked as an instructor on Boeing 727 and DC-10 aircraft and holds airline transport licenses in airplanes and helicopters as well as flight instructor and instrument instructor certificates in airplanes and helicopters. He has logged over 18,000 hours of flight time. His hometown is Monroe, Louisiana where he lives with his wife Susan. They have 2 daughters, Melissa and Laura.

*NUMBER 5:* Robert “Lefty” Langford started flying 40 years ago and has logged some 8,000 hours total. He has owned thirteen A/C and has been a member of EAA since 1975. He has over 2,500 hours in YAK 52s, and is perhaps the highest time YAK 52 pilot in the US. Lefty is retired and lives in Lebanon Tennessee with his wife Marie.

*NUMBER 6:* William “Wild Bill” Walker has been flying for more than 30 years for sport and as a commercial pilot. He has logged over 4000 hours and has owned a variety of different aircraft including a 450 Stearman, Pitts Special, T6D Texan, and L39 Albatross. His daytime job is a real estate developer in Cookeville Tennessee where he lives with his wife Joyce. He has three children; two sons recently graduated from college, and a daughter who is attending the University of Chicago..

## **Ladies and Gentlemen, Please give a warm welcome to your 2009 Red Thunder Airshow Team!!**

Most of the formations you see today were typically flown by military pilots trying to mask their true numbers from enemy aircraft. These Eastern Block aircraft are perfect trainers to teach aggressor pilots how to ingress and egress battle areas for ground attack. The formations you see today are intended to entertain you and the routine is intended to be pleasing to the eye, but these formations also demonstrate how Red Star pilots would use various formations in the attack.

The Finger Tip Formation allows flight lead to insert the maximum number of airplanes into the opposing force’s airspace in complete surprise. Red Thunder flies the Diamond-Delta today with approximately 18 inches of clearance between their wing tips... duplicating Red Star aggressors approaching the Blue Force engagement area.

Military formation flying is used to provide mutual support for friendly forces during combat operations...and this afternoon the formations you will see are not too different from the formations used by our fighter pilots in daily combat operations all over the world. The first and foremost rule in formation flying is trust – these pilots must have absolute trust and confidence in their teammates in order to execute precision. The key to tight formation flying is practice, practice, practice. These Red Thunder pilots fly with the routine frequently, but if you ask them, they will all tell you they would like to fly twice as much.

You will see some of the airplanes producing smoke. We use smoke for two reasons, first it helps the pilots to locate the position of other aircraft... and second it gives people on the ground geometric lines to follow. The smoke is produced by injecting oil into the hot exhaust system of the airplane. The oil used to produce smoke is a paraffin-based oil that is non toxic to the environment or people. It may help however, by keeping the bugs at bay.

Each Red Thunder pilot is an active member in the World Wide Red Star Pilot's Association – an organization dedicated to the safe operation of former eastern block aircraft. Additionally, each pilot is F.A.S.T. or Formation and Safety Team qualified.

These beautiful airplanes are often thought of as "VINTAGE" aircraft. The fact is, both models, the Nan Chang CJ6, and the YAK 52, are still in service today. The Nan Chang is currently used to train Chinese fighter pilots. It is the last trainer a Chinese fighter pilot will fly before transitioning to MIG Jets. The YAK 52 is used by Russian and many other former eastern block countries, to train their fighter pilots in aerobatic flight. It is the perfect aerobatic trainer...able to take stresses up to 9 positive Gs and 6 negative Gs.

It is easy to tell these airplanes apart – the Chinese Nan Chang CJ6 has a Gull or bent wing and a square vertical tail. The Russian YAK has a very straight wing and a rounded vertical tail.

I've had people ask if these airplanes are difficult to fly. The fact is, they are not. The difficult part of this afternoons flight is maintaining exact position on your flight leader. We use various visual cues such as a line of rivets or screws to stay within 3 to 6 feet of flight leader. Precision formation flight requires complete concentration and focus. This is not a skill that is gained in only a few hours, rather it requires months of practice to maneuver your airplane to within 36 inches at 150 miles per hour and bank angles up to 90 degrees.