



Club Meetings

General Meeting:
3/15/14 9:00 AM
N12 CAP Building

Board Of Trustees:
4/3/14- 7:00 PM
First in Flight at
KBLM

General Meeting:
4/17/14 6:30 PM
(Thursday) Belmar
Public Library

March/April 2014

Edited by Charles Burke & Dave Pathe

JPI EDM700: by Frank Fine

We have a new instrument in 4287Q called a JPI EDM700 engine monitor which will greatly improve safety and awareness of engine performance and operation. When the plane is started, it will go into automatic mode and cycle thru EGT's, CHT's, Oil Temperature and Battery Voltage. The digital and analog displays will allow you to easily see if there is a problem and is also used for leaning the mixture properly, Both of these are important for getting the most out of our expensive engines.

First let's talk about leaning the fuel-air mixture in club planes, and then we'll talk about how the EDM 700 can help with that In cruise configuration 1. Lean until the leanest cylinder misfires (roughness) then enrich mixture until the engine runs smoothly again. 2. Exhaust Gas Temperature gauge, lean slowly until the needle peaks and then enrich for two marks or indications on the gauge. Each mark is 25 degrees Fahrenheit. Engine will be running 50 degrees on the rich side of peak. 3. With the JPI-EDM 700 there is a four-digit display of the Exhaust Gas Temperature, and a three-digit display of the Cylinder Head Temperature. On the upper right of the instrument will be an F or C designating Fahrenheit or Centigrade. We use Fahrenheit.

There is also an analog display in bars telling the temperature. They rise from the bottom up. If the columns appear to come down from the top, you are past peak exhaust gas temperature or "lean of peak." Enrich the mixture quickly as detonation can destroy the engine in as little as one minute. Running the engine too lean can cause detonation; it's like hitting the pistons with a sledgehammer. There are six things that can cause detonation. You can control only one – running with a too lean fuel-air mixture.

There are three modes in which the EDM 700 operates: 1. Automatic 2. Manual 3. Lean Find. In "Lean Find" there are actually two mode LOP and ROP (lean of peak and rich of peak) We will use ROP. Automatic is used most of the time. It scans through all the values repeatedly. Manual – Tap the "step" button and the display will stop. It won't move until you tap the "step" button again. Lean Find you tap the "LF" button in the lower right corner and slowly begin leaning. The display will show the first cylinder to peak. There will be a 15-degree rise and a dot will appear over that cylinder. The column will flash. Enrich the mixture 50 degrees on that cylinder. Tap the LF button again and it will return to the automatic mode. You have reached peak EGT when the air and fuel are present in precisely the correct chemical balance. It's called stoichiometric ratio. Best economy cruise is approximately 75% power or less

For maximum service life on the engine, cylinder head temperature should be below 400 degrees Fahrenheit. Cylinder head temperature should be closer to 350 degrees in cruise. Cylinder head temperatures can be as high as 435 degrees when climbing. Exhaust Gas Temperature in cruise – maximum should be 1450 degrees. Normal is about 1350 degrees.

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The EDM700 is relatively expensive but has already paid for itself. After installation, our mechanic noticed that one of the cylinders was running much hotter than the others.

Turns out there was a leak in a gasket that resulted in more air getting into one cylinder which made it run near peak temp. The problem was easily corrected and prevented excess damage or wear.

IMPORTANT!!!

Just a reminder, anyone who is in flight training primary or advanced level, must to submit copies of their identification papers in Dan Coles, the president as soon as possible!

Work on upgrading N12 has been slowed because of the winter weather but there is progress to be noted. Here is where we now stand:

1. The topping of trees at the ends of the runway (Runway End 24) has been completed.
2. Utility lines, along the highway approach side, have been put underground so as to remove this obstruction.
3. Two (2) new fuel tanks have been ordered, one for AV gas and the other for jet fuel. These tanks will be self serve.
4. The new, end of runway lights, will be activated once they have been cleared by the FAA
5. The idea of installing Tee Hangars that will afford better protection for aircraft, is being currently being explored.



New Crosswind Runway at MJX

The new crosswind runway at KMJX, Miller Airport in Toms River, is now open! The new runway is 3600 ft. long by 75ft. wide and carries a full set of lights for both landing and taxiing. The strip has the designation 14/32 .

If you go to http://www.planning.co.ocean.nj.us/airport/01_home.htm, and click on the picture in the upper left corner this will take you directly to the camera.

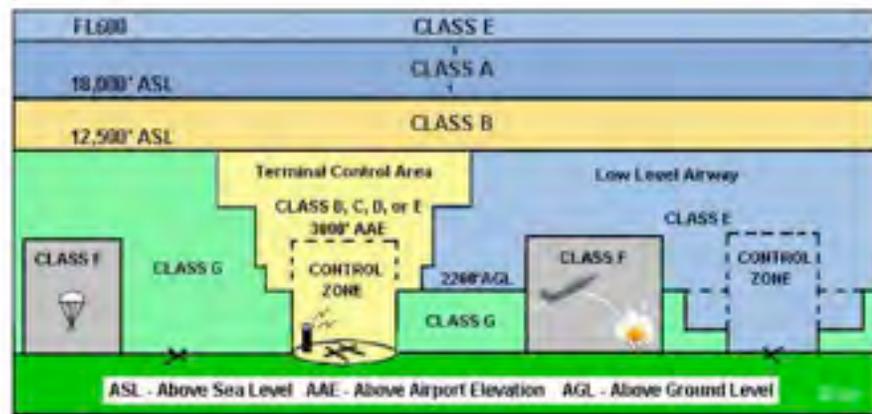
Class F Airspace

We are all familiar with Class A,B,C,D and E airspace but what happened to F? After doing a little research it was discovered that this airspace exists according to ICAO regulations but is ignored here in the USA. However, it is an active designation in the UK and Germany. A quick check of Canadian regulations shows that it is on the books so if should you decide to venture north, you might want to look into this topic a bit deeper.

Class F is a sort of hybrid between "Class E" controlled airspace and "Class G" (fully) uncontrolled airspace with the following characteristics:

1. Uncontrolled. 2. IFR and VFR flights are permitted 3 All participating IFR flights receive an air traffic advisory service
4. All flights receive flight information service if requested.

You can get ATC clearances in Class F airspace just like in controlled airspace. The catch is they're "advisory only" (so you don't have to comply with them, and all the weight is on the pilot's shoulders). Similarly ATC will provide separation services to IFR flights in Class F airspace, but they do so "where possible", which means they might tell you they can't provide that service and you're on your own with see-and-avoid.



Spotlight on Clint Wallace

I was born in St. Andrew, Jamaica West Indies on 20 October 1969, and was married for 17 years but recently divorced. I have 3 wonderful Children Kyle(17) Ian(10) and Lauren (22 months old). My education consists of a Bachelors in Manufacturing Engineering and a Masters in Business Administration. Currently I am Vice President of Human Resources for General Electric's Life Science business. My full time job has enabled me to travel the world. I have been to Brazil, Canada, China, Japan, India, Hungary, France, England, Wales, Sweden, Norway, Germany, Mexico in addition to many countries throughout the Caribbean and travel to many states across the US.

I always wanted to learn how to fly but it really started while growing up in the Caribbean. My house was located over the final approach path to Normal Manley International Airport in Kingston, Jamaica. The big Boeing 727, & 747 aircraft were low and I could observe them throughout the approach and dreamed someday I would be at the controls. As I grew older I wanted to be an aviator in the military and this was a dream that did come true but not exactly as planned. While I now am a retired Air Force Officer , being red/green color blind disqualified me from becoming a pilot.



It was back in September of 2009 that I became involved in flying while living in Wisconsin. A good friend of mine is a pilot who took me for a ride and I was hooked! He climbed up to about 2000ft and gave me control of the airplane and I never wanted to give it back. This led to taking lessons at Palmyra, Wisconsin (88C). It's a grass field that is 2,900ft long and 200ft wide. The area was very flat and filled with lots of farm land so there were many landing choices should you have an engine failure or inflight emergency. There was little local air traffic or major airports nearby so communications with ATC or other aircraft by radio was infrequent.

Prior to learning to fly I was quite afraid of heights. In fact I remember the day my friend took me for a ride in 2009 I was quite scared. I have flown in big jets before and didn't have any issues but in a small plane it was a bit different, I remember when the wheels left the ground I panicked and almost told him to go back to the airport so we can land. But I was determined to beat the fear as my passion for learning to fly was far stronger than the fear and I knew it was all in my mind. With that being said, I have not and won't parasail and I also went ziplining.

There is one funny story to share that took place during my training. The flight instructor was simulating an engine out and wanted to see what I would do. So I went thru the normal drill pitch for best glide and look for a field to land. But while looking for what would be the perfect spot to land, my instructor said, "What about the airport that is just below you"? My response was, "What airport" and he said bank and look below you? Sure enough, there was a landing strip right under the aircraft.

I trained initially in a Cessna 172 and later finished up in a Cessna 150. Both were very old aircraft that always had mechanical issues so not only did I learn to fly also afforded plenty of opportunities to solve basic engine and accessory issues. Since starting to fly, I have flown C-150, C-152, C-172, Piper J3-Cub, and a Piper Archer. I currently am certified as a VFR single engine land pilot and I hope to achieve my IFR rating at some point.

Membership in MAFC began in January of 2012 after researching other clubs in the area. I loved the club that I belong to in Wisconsin and was very choosy on selecting one in New Jersey. Two reasons prompted serious consideration of the club, the selection of aircraft and the fact that the financial parameters regarding membership seemed reasonable.

Ground School by Tom Flieger

After three years without, I have found a "home" through the Monmouth County Park System! The class will begin on Tuesday evening, March 18th and run for ten weeks from 6:30 to 9:30 p.m.

The class will be taught at the Fort Monmouth Recreation Center, off Hope Road in Tinton Falls, easily accessible from the Garden State Parkway, Routes 18, 34, 35 and 36. (Across from the golf course and at the blinking light.)

Registration may be accomplished online at www.monmouthcountyparks.com, then follow the directions at the "Program Registration" page, by phone with a credit card at 732-842-4000, ext. 1, by mail to Registrations, Monmouth County Park System, 805 Newman Springs Road, Lincroft, NJ 07738, or in person at the above address. Registration deadline is Friday, March 14, 2014. Cost for the ten week, thirty hour program is \$150 plus a separate fee for learning materials.



19th Annual NJ Aviation Conference by Rich Stowell 2014 National FAA Team Rep of the Year

On May 2 & 3, 2014, the 19th Annual New Jersey Aviation Conference will be presented by the Mid-Atlantic Aviation Coalition (MAAC) and others. This year's event has been expanded to two days: day one will be a symposium; day two, a unique ground school session.

Friday, May 2nd: *Seize the Day - Build for Tomorrow* Symposium

Princeton University, Princeton, NJ. The symposium will feature a question and answer session with NJ DOT Commissioner and fellow pilot Jim Simpson, as well as four panels of experts discussing Education, Policy, Safety, and Technology issues. I will present the keynote during lunch and will participate on the Safety Panel.

The cost to attend the symposium in Princeton on May 2nd is \$50. The fee includes a continental breakfast, lunch, post-symposium reception, and chance to win one of several door prizes. Seating is limited to the first 140 registrants.

Saturday, May 3rd: The Art and Science of Flying Ground School

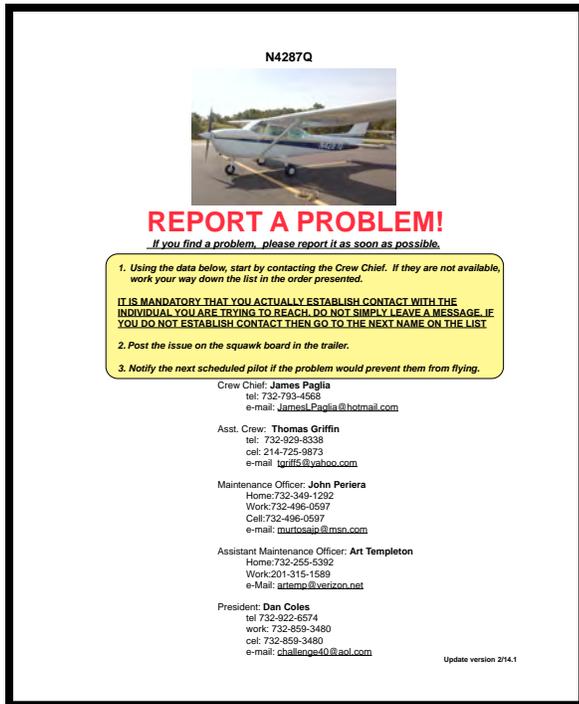
Alexandria Field Airport (N85), Pittstown, NJ. Along with SAFE member Linda Castner, I will debut a brand new type of ground school that weaves history, biology, and technology into a high-level exploration of the wonder of flight in general, and of airplane and human performance in particular.

The cost to attend the daylong ground school in Pittstown on May 3rd is \$50 (discounted to \$35 if you also attend the symposium the day before), and includes lunch, a Certificate of Completion, and a chance to win a door prize. I anticipate WINGS approval as well. Seating is limited to 100 participants, and people are already signing up.

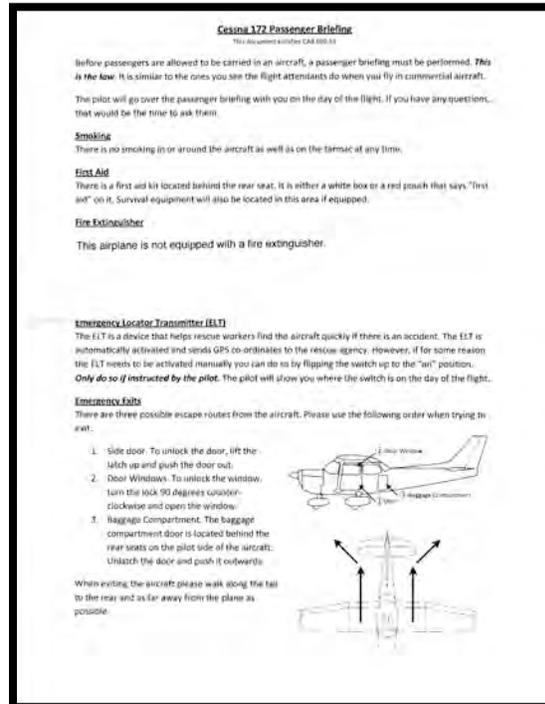
For more information go to www.niaviation.com/conference2014/conference2014.html and www.ArtandScienceofFlying.com

Updated Aircraft problem Passenger briefing cards

Just a reminder that copies of the latest version of the "Report a Problem" information cards have been placed in all of our aircraft as well as in the logbooks.. In addition, a new set of the Passenger Briefing cards were run off and these were also placed in the corresponding models..



Problem Reporting Cards (example)



Passenger Briefing Cards (example)

Two Stories BOTH TRUE - Submitted by Mario Marzilli

STORY NUMBER ONE

Many years ago, Al Capone virtually owned Chicago . Capone wasn't famous for anything heroic. He was notorious for enmeshing the windy city in everything from bootlegged booze and prostitution to murder.

Capone had a lawyer nicknamed 'Easy Eddie.' He was Capone's lawyer for a good reason. Eddie was very good! In fact, Eddie's skill at legal maneuvering kept Big Al out of jail for a long time. To show his appreciation, Capone paid him very well. Not only was the money big, but Eddie got special dividends, as well. For instance, he and his family occupied a fenced-in mansion with live-in help and all of the conveniences of the day. The estate was so large that it filled an entire Chicago City block.

Eddie lived the high life of the Chicago mob and gave little consideration to the atrocity that went on around him. Eddie did have one soft spot, however. He had a son that he loved dearly. Eddie saw to it that his young son had clothes, cars, and a good education. Nothing was withheld. Price was no object.

And, despite his involvement with organized crime, Eddie even tried to teach him right from wrong. Eddie wanted his son to be a better man than he was. Yet, with all his wealth and influence, there were two things he couldn't give his son; he couldn't pass on a good name or a good example.

One day, Easy Eddie reached a difficult decision. Easy Eddie wanted to rectify wrongs he had done. He decided he would go to the authorities and tell the truth about Al 'Scarface' Capone, clean up his tarnished name, and offer his son some semblance of integrity. To do this, he would have to testify against The Mob, and he knew that the cost would be great. So, he testified. Within the year, Easy Eddie's life ended in a blaze of gunfire on a lonely Chicago Street . But in his eyes, he had

given his son the greatest gift he had to offer, at the greatest price he could ever pay. Police removed from his pockets a rosary, a crucifix, a religious medallion, and a poem clipped from a magazine. The poem read: 'The clock of life is wound but once, and no man has the power to tell just when the hands will stop, at late or early hour. Now is the only time you own. Live, love, toil with a will. Place no faith in time. For the clock may soon be still.'

STORY NUMBER TWO

World War II produced many heroes. One such man was Lieutenant Commander Butch O'Hare. He was a fighter pilot assigned to the aircraft carrier Lexington in the South Pacific. One day his entire squadron was sent on a mission. After he was airborne, he looked at his fuel gauge and realized that someone had forgotten to top off his fuel tank. He would not have enough fuel to complete his mission and get back to his ship. His flight leader told him to return to the carrier. Reluctantly, he dropped out of formation and headed back to the fleet.

As he was returning to the mother ship, he saw something that turned his blood cold; a squadron of Japanese aircraft was speeding its way toward the American fleet. The American fighters were gone on a sortie, and the fleet was all but defenseless. He couldn't reach his squadron and bring them back in time to save the fleet. Nor could he warn the fleet of the approaching danger. There was only one thing to do. He must somehow divert them from the fleet.

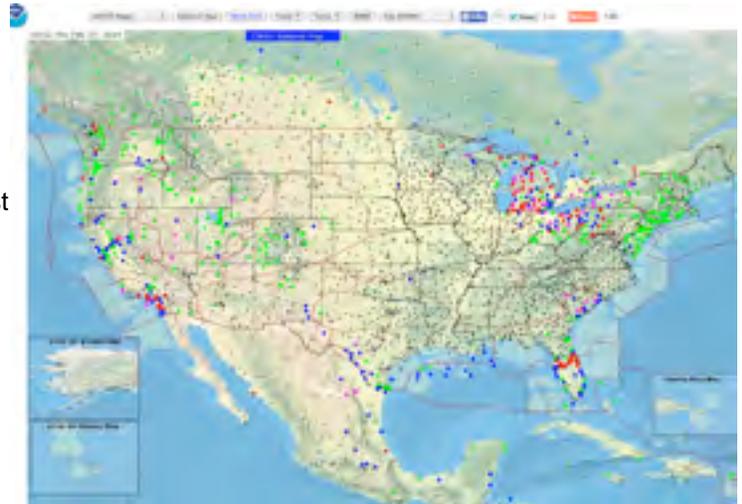
Laying aside all thoughts of personal safety, he dove into the formation of Japanese planes. Wing-mounted 50 caliber's blazed as he charged in, attacking one surprised enemy plane and then another. Butch wove in and out of the now broken formation and fired at as many planes as possible until all his ammunition was finally spent. Undaunted, he continued the assault. He dove at the planes, trying to clip a wing or tail in hopes of damaging as many enemy planes as possible, rendering them unfit to fly. Finally, the exasperated Japanese squadron took off in another direction. Deeply relieved, Butch O'Hare and his tattered fighter limped back to the carrier.

Upon arrival, he reported in and related the event surrounding his return. The film from the gun-camera mounted on his plane told the tale. It showed the extent of Butch's daring attempt to protect his fleet. He had, in fact, destroyed five enemy aircraft. This took place on February 20, 1942, and for that action Butch became the Navy's first Ace of W.W.II, and the first Naval Aviator to win the Congressional Medal of Honor.

A year later Butch was killed in aerial combat at the age of 29. His home town would not allow the memory of this WW II hero to fade, and today, O'Hare Airport in Chicago is named in tribute to the courage of this great man. So, the next time you find yourself at O'Hare International, give some thought to visiting Butch's memorial displaying his statue and his Medal of Honor. It's located between Terminals 1 and 2. SO WHAT DO THESE TWO STORIES HAVE TO DO WITH EACH OTHER? Butch O'Hare was 'Easy Eddie's' son.

Unique Weather Map: Submitted by Burt Greene

This is one you might want to explore, a..unique weather map - Just your mouse over any airport for the current conditions. Click on the locations and get even more detailed weather information. <http://www.wrh.noaa.gov/zoa/mwmap3.php?map=usa>



Takeoffs are Optional, Landings Are Mandatory



D'Anton First Solo

Tom Flieger announced that on February 20, Nicole D'Anton flew her first solo. Congratulation Nicole!