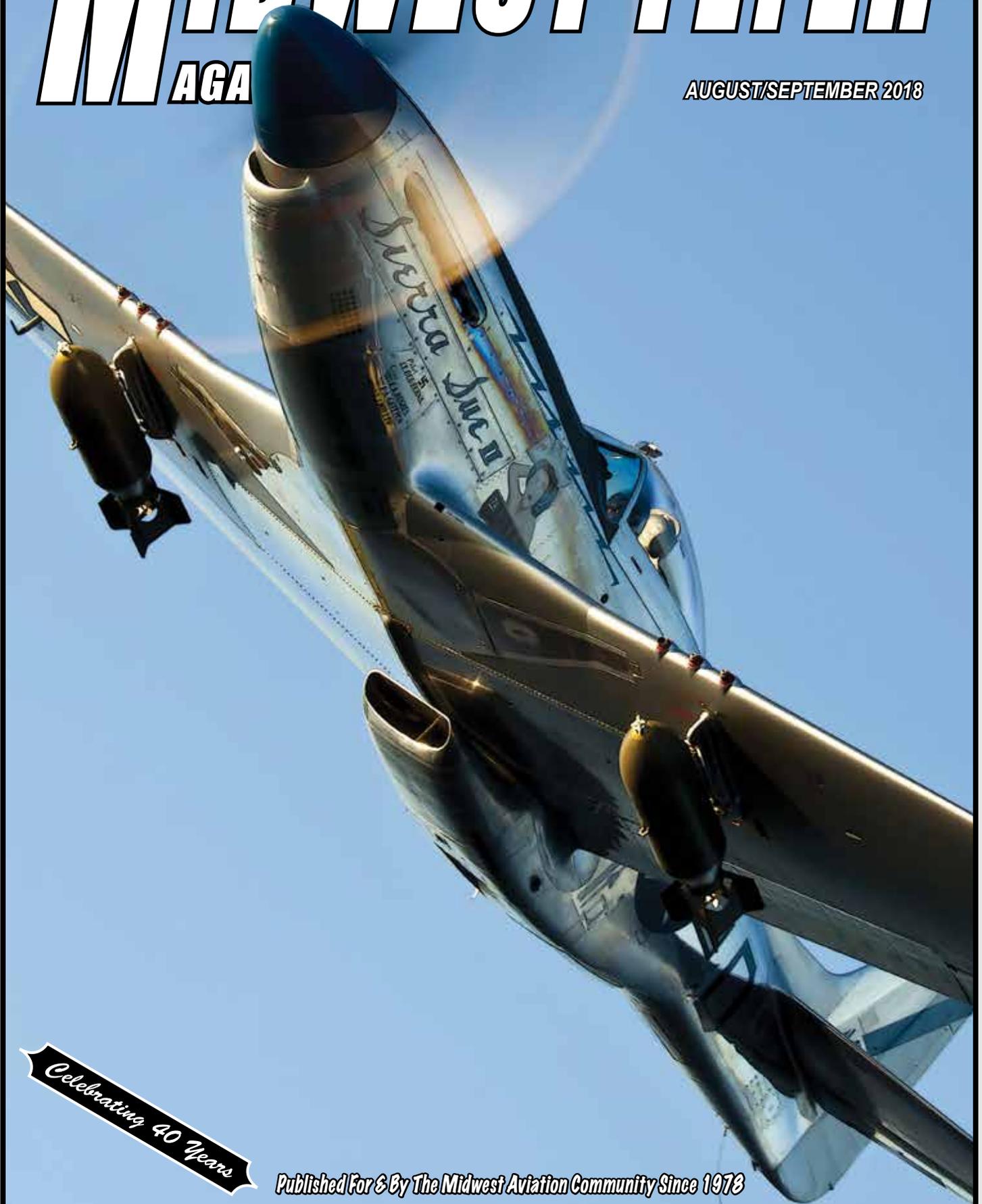


# MIDWEST FLYER

AGA

AUGUST/SEPTEMBER 2018



*Celebrating 40 Years*

*Published For & By The Midwest Aviation Community Since 1978*

midwestflyer.com



The State of Minnesota provides this Technical Bulletin in the interest of Aviation Safety and to Promote Aeronautical Progress in the State and Nation.

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## Multi Modal MnDOT

by *Cassandra Isackson*

*Director, Minnesota DOT Office of Aeronautics*

**D**o you know that the Minnesota Office of Aeronautics is just one part of your very important state transportation organization, MnDOT. The Minnesota Department of Transportation (MnDOT) is made up of a group of offices that handle specific modes of transportation. There is your Office of Aeronautics that handles many parts of Minnesota's aviation, of course. But there are also the MnDOT offices that handle automobiles, bridges, trucks, buses, limo's, and special transportation services, transit, rail, waterways, bicycles, and pedestrian safety.



Cassandra Isackson

I hope you will take the time to check out what MnDOT does and accomplishes for all citizens of the state by going to <https://mn.gov/dot>. In the interim, I'll give you some interesting facts to think about that will hopefully peak your interest and help you learn a little more about the great state of Minnesota.

Facts: Minnesota (as of 2016) had a population of 5.5

million people. There were 6.4 million registered motor vehicles. There are 379 miles of Twin Cities area freeways. There are also approximately 12,000 miles (or 30,585+ lane-miles) of state highways managed by MnDOT.

Minnesota is a great aviation state with more than 16,000 pilots and approximately 6,000 registered aircraft. There are also 135 publicly-owned and operated airports throughout the state. And did you also know there are 4,376 miles of railroad track, along with 222 miles of navigable rivers in Minnesota? Okay, one last cool fact... There are 20,592 bridges throughout Minnesota that are 10 feet long or greater.

So now perhaps you can get a feeling for how important a multi-modal organization like MnDOT really is. We cover the state with an overriding goal to help make all transportation safe, efficient and easy to access throughout our 87 counties. When you drive to the airport to take an overseas trip, or locally just for a pleasure trip, remember, MnDOT is working hard for you no matter what your mode of travel may be.

We look forward to seeing you at one or more of the always-fun air events in the state. If you have an event coming up, please let us know so we can list it on our website and share that information with others (<http://www.dot.state.mn.us/aero/events/flyins-and-events.html>).



## Non-Towered Airport Flight Operations

**P**ilots! Are you aware of a relatively new advisory circular (AC) that applies to aircraft operators operating at or in the vicinity of an airport without a control tower or at an airport with a control tower that operates only part time? It is **AC 90-66B** Non-Towered Airport Flight Operations that was issued March 13, 2018. You can download your own copy of the document at: [https://www.faa.gov/regulations\\_policies/advisory\\_circulars/](https://www.faa.gov/regulations_policies/advisory_circulars/)

According to **AC 90-66B**, "PURPOSE OF THIS ADVISORY CIRCULAR (AC)", this AC calls attention

to regulatory requirements, recommended operations, and communications procedures for operating at an airport without a control tower or an airport with a control tower that operates only part time. It recommends traffic patterns, communications phraseology, and operational procedures for use by aircraft, lighter-than-air aircraft, gliders, parachutes, rotorcraft, and ultralight vehicles. This AC stresses safety as the primary objective in these operations. This AC is related to the right-of-way rules under Title 14 of the Code of Federal Regulations (14 CFR) part 1, § 1.1 (traffic pattern), and part 91, §§ 91.113 and 91.126."

Also, the AC *replaces* AC 90-66A, Recommended Standard Traffic Patterns and Practices for Aeronautical Operations at Airports without Operating Control Towers, dated August 26, 1993; and AC 90-42F, Traffic Advisory Practices at Airports Without Operating Control Towers, dated May 21, 1990. AC 90-66B reflects current procedures and best practices

at airports without operating control towers and includes relevant material from AC 90-42F.

Please take the time today to download and read your personal copy of **AC 90-66B**. It is packed with very relevant information and diagrams. □

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## Did you know...

\*The Search and Rescue Satellite Aided Tracking (SARSAT) system uses National Oceanic and Atmospheric Administration (NOAA) satellites in low-earth and geostationary orbits, as well as GPS satellites in medium-earth orbit to detect and locate aviators, mariners, and land-based users in distress. The satellites relay distress signals from emergency beacons to a network of ground stations and ultimately to the U.S. Mission Control Center (USMCC) in Suitland, Maryland.

The USMCC processes the distress signal and alerts the appropriate search and rescue authorities as to who is in distress and, more importantly, where they are located. Truly, SARSAT takes the “search” out of search and rescue!

NOAA-SARSAT is a part of the international Cospas-Sarsat Program to which 41 nations and two independent SAR organizations belong.

\*All of the above is taken directly from the NOAA SARSAT website at: <http://www.sarsat.noaa.gov/>

### And by the way...

Federal law requires that all emergency locator transmitters (ELTs), personal locator beacons (PLBs), and emergency position indicating radio beacons (EPIRBs), be registered with NOAA SARSAT.

Registration is **free** and can be done online or by contacting the NOAA SARSAT Beacon Registration Database at **1-888-212-SAVE** (7283). Registration should also be updated if the aircraft or device is sold or when owner information changes.

### Check this out...

Current NOAA SARSAT statistics:

Number of people rescued in Calendar Year 2017 in the United States: 62

Rescues at sea: 31 people rescued in 9 incidents.

Aviation rescues: 6 people rescued in 2 incidents.

Terrestrial PLB rescues: 25 people rescued in 11 incidents.

United States – 8,385 People Rescued (since 1982)

One more thing...

NOAA SARSAT wants to educate the entire GA community about how to avoid false alerts. They are happy to include training on proper test procedures, as well as what to do if your device is accidentally activated. According to SARSAT, false alerts from accidental activation of 406 MHz ELTs by aircraft operators is a major issue, with more than *8,500 false alerts recorded in 2017*. If a beacon is accidentally activated, the U.S. Air Force Rescue Coordination Center should be contacted at 1-800-851-3051. Officials will need the beacon’s ID to cancel the false alert.

Remember, NOAA SARSAT stopped listening for beacons on 121.5 MHz, February 1, 2009. So, if you still have one in your aircraft, you need to know it will **not** be heard by SARSAT. This is a good time to upgrade your equipment and get switched over to the new 406 MHz beacons. And here are a few important facts to help you make the decision to upgrade your equipment right away: The old 121.5 MHz (VHF) beacon produced a signal footprint of from 12-15 nautical miles wide. The 406 MHz beacon produces a more accurate signal footprint of about 1-3 nautical miles.

Did you know that the old 121.5 MHz system’s initial position of uncertainty result was a 500 square mile search area on average, whereas the 406 MHz system with a *non-GPS* equipped beacon produces an initial position of uncertainty result of a 25 square mile search area on average. A beacon that is GPS equipped can produce a search area result of less than 100 yards.

For additional information, go to: <http://www.sarsat.noaa.gov/> □

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## How To Avoid ADS-B Call Sign Mismatch

**T**his is a detail packed article that every aircraft owner and every pilot should read. This article is one of a number of great articles in the FAA Safety Briefing Magazine, Winter 2017-Spring 2018, edition. The article by Tom Hoffman, Managing Editor, FAA Safety Briefing, with the above title, begins with, “A name or aircraft registration number/call sign is critical to the integrity of the ADS-B Out system and defines who you are in the National Airspace

System.”

I urge you to check it out right away. I am confident many of your questions about ADS-B will be answered and you will fly away with a lot of new and very useful knowledge. To download a free copy of the magazine, go to: [https://www.faa.gov/nextgen/equipadsb/resources/media/ADS-B\\_Equip\\_Now.pdf](https://www.faa.gov/nextgen/equipadsb/resources/media/ADS-B_Equip_Now.pdf) □