Well the election is over and my predictions were right: The sun did come up in the east the next morning. The intervening time has certainly been, um, interesting, and it looks like it will continue to be, um, interesting for at least some time to come.

Winter weather can always make life interesting around airports, and this winter has been no exception. The hard start with December snows, followed by cold shots, then fog, low ceilings, more fog, freezing varieties of precipitation, and some teasing warm days create humorous challenges. Juggling hangar space, deicing, and plowing runways, taxiways, and ramps are just the start. Preheating engines, cold, soaked equipment, ice-covered roads delaying deliveries—these all add complications. Throw in closed airports, severely altered airline schedules, snowed-in aircraft that were to arrive for maintenance or avionics, and you start to get the picture of what we typically deal with.

Through it all, our flight schools have been jumping, charter and corporate flights completed on time, fuel trucks where they are supposed to be, and operations normal at our airports. This doesn’t happen automatically but through the great efforts of our pilots, CSRs, dispatchers, technicians, and especially our line personnel. Fueling aircraft at -25 degrees windchill probably doesn’t make it high on anyone’s job-satisfaction list, yet day or night, rain, snow, or ice, our line techs take care of your plane, prep your rental, fuel your airliner, or dig out your hangar during these harsh winter months—and deserve a big THANK YOU from all of us. So maybe the next time you see one, take a second and say thanks and let them know you appreciate them keeping our lives from getting a little, um, more interesting.

Jeff Baum

Ode to Winter—and a Little Thanks

On July 15, 2016, Congress passed legislation to extend the FAA’s funding. This legislation, FAA Extension, Safety, Security Act of 2016 (FESSA), includes relief from holding an FAA medical certificate for certain pilots. The FAA has adopted and supports the third-class medical reform rule, named BasicMed, because it “will simplify our regulations and keep general aviation flying affordable.”

When does the legislation take effect?

In the legislation, Congress required that the FAA issue regulations within six months using the guidance in FESSA. The FAA is required to issue or revise regulations to codify the relief in FESSA by January 10, 2017. The FAA has met this deadline, and the regulation was published in the Federal Register on Tuesday, January 10.

Continued on page 10
If your goal for the new year is to upgrade your aircraft to ADS-B compliance, Wisconsin Aviation’s avionics shop has a few good options for you. These options all comply with the 2020 FAA ADS-B mandate. Here are three main transponder solutions we have experience with:

**L3 Technologies Lynx NGT-9000**

The touchscreen Lynx NGT-9000 is a one-box solution that gives you everything you need to be in and Out ADS-B compliant. Plus, with Lynx you can view ADS-B traffic and weather on compatible flight displays like Aspen and popular pilot apps like ForeFlight, WingX Pro and many more. It offers:

- 1090 MHz Mode S ES
- Dual 1090/978 In
- Internal WAAS/GPS ADS-B position source
- Resistive Touchscreen Display
- Compatible MFD Interface to display ADS-B weather and traffic
- WiFi module to display ADS-B weather and traffic to an iPad or Android

Approximately $9490 installed

**Appareo Stratus ESGi w/GPS**

The Stratus ESGi is a kit that contains two products—a certified Stratus ESG Mode S transponder and a non-certified ADS-B receiver.

- **Stratus ESG (ADS-B Out)**
  - Certified 1090ES transponder
  - Built-in WAAS GPS
  - GPS antenna included

- **Stratus 2i (ADS-B In)**
  - Non-certified receiver made only for Stratus ESG
  - Backup AHRS
  - Integrated with ForeFlight on iPad
  - Requires connection to Stratus ESG
  - All data is displayed on your iPad through the Stratus 2i unit.

Approximately $7250 installed

**Garmin GTX-345 with GPS**

Garmin’s all-in-one Mode S Transponder Solution for ADS-B Out and In features:

- 1090 MHz ADS-B Out enables aircraft to operate at any attitude, in any airspace.
- Combines Mode S Extended Squitter (ES) transponder and optional WAAS/GPS position source in a single unit.
- Provides access to dual-link ADS-B In traffic and subscription-free weather on compatible displays.
- Wirelessly stream weather, traffic, GPS position and backup attitude via Connext® link to Garmin Pilot™ and ForeFlight Mobile apps, as well as the aera® 795/796 portables.
- Easy replacement for your existing transponder, with common 1.65-inch tall form factor.
- Supports iPhone, iPad, Android, and aera® 795/796.

Approximately $8975 installed

These are only three of the available ADS-B solutions. For a free consultation on which system would work best for your aircraft or for a price quotation, contact Wisconsin Aviation’s avionics department at 608-268-5006 or Avionics@WisconsinAviation.com.

Ryan Walsh
Avionics Manager, MSN
As discussed in previous issues, night flying requires good knowledge of how the airport environments will appear in the dark, and that goes for ground operations as well. The essential elements of airport lighting systems include:

**Taxiway lights:** These eye-catching blue lights make it easy to distinguish taxiways from runways and help guide you during taxi, but in the dark it can be challenging to see where to turn and where to stop. When in motion, the aircraft taxi or landing light will help keep the yellow taxiway centerline in view as these are usually unlighted. Taxi at slower speeds at night to ensure you stay on track.

**Runway lights:** The default color for runways is white and will often vary in brightness. Most airports have pilot-controlled night lighting available by clicking the mic on the local radio frequency to turn runway lights on, off, or to change the brightness. Some airports have colored runway lights with amber and red to indicate distance remaining during takeoff and landing.

**Runway holding position signs and markings:** Red lighted signs to mark the entrance to runways are standard at airports, and clearly show what runway you’re about to enter. (A detailed review of airport signs is coming in the next issue.)

**Airport beacon:** Public-use civilian airports have universal green/white flashing beacons, which you can often see many miles away on clear nights. This is the most common beacon you’ll see around; occasionally you’ll spot military airports with green/white/beacon and heliports with white/yellow/green. (By the way, lighted water airports have white/yellow beacons.)

**Approach lights:** These come in many sizes and designs, including flashing lead-in lights to help guide aircraft to the threshold of the runway in low visibility. Regardless of the type of system, key things to watch for at night include Runway End Identifier Lights (REIL), flashing strobes at the left and right corners of the threshold, steady green threshold lights running across the width of the runway and, at the other end, a row of steady red lights to mark the end of the runway.

**VASI/PAPI:** Many runways have Visual Approach Slope Indicators (VASI) and Precision Approach Path Indicators (PAPI) for additional guidance in the final descent to the runway. These use red lights to indicate “low” and white to indicate “high.” When you see both red and white in equal amounts, you’re on the ideal descent path to the runway.

In the next issue, we’ll take a closer look at airport markings and signs.

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Leonard Drydyk is the father of aviation in Watertown. In the summer of 1944, he established the first airport in Jefferson County, located on Highway Q three miles south of Highway 19. The airport was opened on July 1, 1944. Drydyk offered sightseeing flights, but most of his time was spent giving flight lessons. By October of 1944, Drydyk was giving lessons to 25 student pilots. The site seemed perfect with plenty of room for expansion. In March of 1945, the Watertown Junior Chamber of Commerce sent a questionnaire to all of the prominent business leaders in Watertown asking if the city needed an airport. The reply was a resounding “yes” and that it should be within “a reasonable proximity to the city.” So a committee selected the present site. The airport on Q was packed up lock, stock, and barrel, including the hangar, and moved to the new site on the south side of Watertown. Drydyk moved with the airport and became the first manager of the Watertown Municipal Airport. Nothing can be found about Drydyk after 1945. If you have any information about him, please contact the Talewinds staff.
Wisconsin Aviation Offers Cirrus Training, Rentals & Maintenance

Cirrus-Approved Flight Training
As a factory-authorized Cirrus Training Center, Wisconsin Aviation is proud to offer training for Cirrus pilots. With the recent certification of Wisconsin Aviation Flight Training Director Sean Hatley, Wisconsin Aviation now has two CSIPs (Cirrus Standardized Instructor Pilots) available for the following: Initial Cirrus transition training in our aircraft or yours, recurrent training, IFR training, and IFR/VFR refresher courses.

The benefits of CSIP training: Cirrus Aircraft’s worldwide network of flight training professionals provides unmatched expertise in Cirrus flight training. Cirrus works only with exceptional people and organizations to continue its unprecedented training outreach. Cirrus Aircraft’s global network of Cirrus Training Centers and CSIPs will get you flying in a Cirrus aircraft quickly, efficiently, and safely. For more information, visit CirrusAircraft.com/flight-training/flight-training-network.

Cirrus-Approved Service Center
As a factory-authorized Cirrus Service Center, Wisconsin Aviation can handle all your Cirrus maintenance needs from a simple oil change to the installation of air conditioning. We offer the following services: Pre-purchase inspections, 100-hour inspections, annual inspections, compliance with airworthiness directives (ADs) and service bulletins (SBs), discrepancy diagnosis and correction, composite repairs, paint repair/blending, and CAPS replacement. Pickup and delivery service is available.

Cirrus Aircraft for Rent
Wisconsin Aviation has two Cirrus aircraft available for rent, both equipped with state-of-the-art avionics. With speeds up to 180 mph, these four-seat aircraft can easily reach regional destinations. For example, you can fly to the following places within two hours: Chicago area, Twin Cities, Detroit, Sault Ste. Marie, Duluth, Indianapolis, Grand Rapids, and Mackinac Island. N708ES will soon be available for single-engine charter service as well and is a cost-effective solution for short-range destinations.

For more information on Cirrus training, rentals, or maintenance, visit WisconsinAviation.com.
Atrial Fibrillation and Your Medical Certificate

Atrial fibrillation is a common arrhythmia, especially in the aging population. The primary concerns regarding atrial fibrillation are a ventricular rate that is very fast or very slow and the potential for stroke due to an embolism. Since the atria, the upper chambers of the heart, are fibrillating (beating very rapidly and ineffectively), the blood is not pumped out normally with each heartbeat. Therefore, there is a potential for the blood, which is not flowing normally, to clot. The danger is that a clot can break off and travel via the arteries to the brain causing a stroke.

When atrial fibrillation is diagnosed, the initial decision for a medical issuance must be made by the FAA. Subsequently, special issuance can be handled by the AME via AASI (AME Assisted Special Issuance).

If there is a remote history (greater than five years) of atrial fibrillation and documentation of previous negative workup for coronary artery disease and structural heart disease, the AME can issue.

The initial evaluation requires an echocardiogram, a 24-hour Holter monitor, and coronary vascular evaluation to include an exercise tolerance test.

For AASI, there must be an initial authorization granted by the FAA. Data needed would include a detailed history since the last FAA examination, name and dosage of any medications with comment in regards to side effects, a 24-hour Holter monitor performed within the last 90 days, and a minimum of INR (International Normalized Ratio) results for the immediate six months prior. The examiner must defer to AMCD (Aerospace Medical Certification Division) if the Holter monitor demonstrates a heart rate greater than 120 or pauses greater than three seconds, more than 20% of INRs are less than 2.0 or greater than 3.0, or if the airman develops bleeding that required medical intervention, emboli, thrombosis, or any other cardiac condition. Newer medications, such as Pradaxa, Eliquis, and Xarelto, are now allowed as well. These medications do not require monitoring as does Warfarin. However, the airman should be stable on these medications for at least 30 days before data is submitted to the FAA.

Note that in certain circumstances, especially in younger, healthy airmen, aspirin alone may be advised by the treating physician. In that case, INR testing is not needed.

A Visit with the AME

Dr. Terry Turke is an FAA Senior Aviation Medical Examiner (AME) located in Watertown, Wisconsin (920-261-2020). Ask the AME

Have questions about your medical or about the human factors associated with flying? Send them to: Talewind@WisconsinAviation.com or mail to Wisconsin Aviation Talewinds, 1741 River Drive • Watertown, WI 53094

Wisconsin Aviation Instructor Pilot Earns Spot on Flight Training Honor Roll

Wisconsin Aviation Flight Instructor Jeff Anderson has been recognized for his high standard of flight instruction by the Aircraft Owners and Pilots Association (AOPA), the world’s largest aviation association. Anderson has been awarded a spot on the Flight Training Excellence Awards Honor Roll, a title given to high-scoring flight instructors from AOPA’s 2016 Flight Training Excellence Poll.

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AOPA’s Flight Training Excellence Awards were created to highlight the best flight training the industry has to offer. “This year’s winners are great examples of high quality and effective flight training. The recognition is well deserved,” said Chris Moser, AOPA’s senior manager of flight training initiatives. “The Flight Training Excellence Awards were created to recognize best practices in flight training—excellent customer service, quality education, community development, and sharing knowledge. We are excited to spotlight their excellent work.”

The 2016 awards were drawn from flight students and pilots who voluntarily reviewed their flight training experience last summer through an AOPA online poll. The process yielded an evaluation of 1,515 individual flight instructors.

Jeff Anderson is a certified flight instructor at Wisconsin Aviation’s Juneau location with ratings as a CFII (instrument flight instructor), MEI (multi-engine instructor), and an ATP (airline transport pilot).

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The Newly Adopted “BasicMed”
(continued from page 1)

When can I operate under BasicMed?
Although the FAA has published the BasicMed rules, the regulations do not go into effect until May 1, 2017. This is to allow time for a comment period on the information collections, as required by the Paperwork Reduction Act of 1995. After that point, if you meet the BasicMed requirements, you can operate without an FAA medical certificate.

Basic Pilot Requirements:
• Possess a U.S. driver’s license.
• Have held a medical that was valid at any time after July 15, 2006.
• Have completed a medical education course described in FESSA within the past 24 calendar months. A free online course meeting this requirement will be offered on AOPA’s website.
• Have received a comprehensive medical examination from a State-licensed physician within the previous 48 months.
• Is under the care and treatment of a physician for certain conditions.
• Make certain health attestations and agree to a National Driver Register check.

Basic Aircraft Requirements:
• Any aircraft authorized under federal law to carry not more than six occupants.
• Has a maximum certificated takeoff weight of not more than 6,000 pounds.

Basic Operating Requirements:
• Carries not more than five passengers.
• Operates under VFR or IFR, within the United States, at less than 18,000 feet MSL, not exceeding 250 knots.
• Flight not operated for compensation or hire.

For more information, visit: www.faa.gov/licenses_certificates/airmen_certification/basic_med/
Your Spring Talewinds is here!!

What’s Around the Corner

April 25  MSN – UAS Drone Seminar – Tuesday, 6–8 pm
For more information: www.faasafety.gov

May 16  MSN – AOPA Safety Seminar – Tuesday, 7–9 pm

May 20-21  RYV – Watertown Military Show & Hangar Dance – In Support of Our Veterans
Saturday, 7:30 am – 10 pm & Sunday, 7:30 am – 5 pm

June 4  UNU – Pancake Breakfast & Open House – Sunday, 8 am – Noon

June 10  MSN – AOPA Rusty Pilots Seminar – Saturday, 9 am – Noon

July 22  MSN – 16th Annual Hangar Dance – To benefit Badger Honor Flight
Saturday, 6–10:30 pm – Music by Ladies Must Swing at 7 pm

July 24-30  OSH – EAA AirVenture 2017 – Visit us at Booth #3162

August 12  MSN – Wisconsin Aviation Air Rally II – Saturday, 8 am – 4 pm

Sept 10  RYV – Pancake Breakfast & Airport Open House – Sunday, 8 am – 3 pm

Classes are subject to minimum student enrollment; pre-registration is required. Dates and times are subject to change, and class fees may apply. For more details, visit our website at WisconsinAviation.com or email us at WisAv@WisconsinAviation.com.