

FAA Remote Identification Requirement Goes Into Effect March 16th

by Jim Cook

(Editor's Note: The following information contained in this article has been compiled from an article in **Model Aviation** by Chrystal Pearson, articles on the Internet by Sally French (DroneGirl) and from The Pilot Institute on the Internet)

The time has finally arrived. On March 16th, 2024 (this month) the FAA will begin to enforce the requirement that UAS devices (uncrewed aircraft systems) must have FAA-approved onboard remote identification equipment that are capable of transmitting UAS identifications and locations during the entirety of their flights.

There are exemptions to this requirement:

- Drones (any model aircraft) weighing less than 250 grams that are flown recreationally. That is 0.55 pounds. Other than very small indoor-racing drones, there are very few aircraft that are this small to qualify for the exemption.
- Drones (any model aircraft) flying in an FAA-Recognized Identification Area (FRIA). TCRC's Jordan Flying Site is a FRIA. The club has also applied to the FAA to get FRIA status for the Fairgrounds Flying Site, but as of yet that site has not been given approval.

These are the only two exemptions. If your UAS is not less than 250 grams in weight or is not flying at a FRIA, you MUST have an FAA-approved onboard remote identification module operational during your flights.

So, if you plan on flying at an outdoor R/C event that is not taking place at a FRIA, or is not an approved AMA-sanctioned event, you MUST have remote ID. Going outside your house and testing out your tried-andtrue drone for a few minutes WILL require remote ID. Using your drone to do some photo op of your property WILL require remote ID.

The FAA just recently granted the AMA a National Authorization that allows members at **AMA-sanctioned events** to operate without broadcasting Remote ID information, as long as the CD has met several requirements for the event. Hopefully this will include TCRC's Spring Float Fly at Bush Lake Park.

So, how do you as a pilot update your aircraft to have remote ID?

First, in the quadcopter world, some of the drone manufacturers are already incorporating built-in remote ID's into their UAS's. DJI has been very instrumental in this regard with approximately 30 drone models now equipped with remote ID. DJI will be doing a firmware update prior to March 16th, which will activate the remote ID function. However older models will NOT have remote ID and will have to be updated with an addon module.

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A Note from The Head Wing Nut

By Bob Briesemeister



Hello Members,

March is here and so is Spring, so it seems with temperatures in the 60s and even 70. This a result of the winter that wasn't. So far, we have had a total of 14 inches of snow and no snow on the horizon. With mild temperatures all winter and only a handful of days below zero it is the warmest winter on record. The lack of snow has put most of Minnesota in a high risk for fire so please do not have any fires at the TCRC flying field. With the lack of snow, the possibility of flooding is low but there is always the chance of heavy spring rains. Keep your fingers crossed.

With the mild winter some members have taken advantage of it and have been flying all winter off the runways. The road and parking lot are soft and muddy with the snow we had last week, and the frost is still coming out of the ground. I had some rock brought out to the field to spread on the road and parking lot. I tried to spread it last week, but I was doing more damage than good because it was too soft. I will hopefully get it spread this week or when it has dried out enough to allow me to do so. Feel free to drive around the pile of rock but you might have to wash your car if you do. You can also fly at the Fairgrounds as long as you are using a 2.4 transmitter. There are a couple of fences that you will have to avoid.

Last fall at the Grassfield's swap meet I was visiting with the president of the Grassfield RC Club and the idea of having a Fun Fly between the two clubs alternating at their field and the TCRC field every other year, or possibly each year. There is a tentative date of June 8th for the TCRC invasion of their field. More information as the date gets closer.

TCRC has the April Fools Fun Fly on Saturday the 6th of April. This fun fly is not run by any particular person it is just an excuse to go flying if the weather is nice. So come out and fly if the winds are light and it is not raining. Start time is usually after 10 am.

There is a Spring clean-up day scheduled for May 4th. I will come up with a list of items to possibly accomplish this year.

The next membership meeting is on March 12th at Crosspoint Church at 7 pm. Bring something to show -- maybe a plane you built this winter or purchased at the auction. Think of a good joke to start the meeting. See you there.

Always Wear An Orange Vest To Retrieve A Plane

Big Game Hunting season is over in Minnesota, but there are still small game seasons like crow and turkey in March and April. It is a club requirement to wear an orange vest if you go into the woods.

If your airplane does go down in the woods, the orange vests are quite close. The orange vests are stored in the rafters of the shelter and easy to reach.

Be safe! Wear an orange vest anytime you have to retrieve an airplane.

For Sale

President Bob Breisemeister has some very nice airplanes for sale.

Bob's planes range from small electric ARF's up to 1/3-scale sport planes. Some planes are still in kit form, and some are entirely completed.

The prices of the various planes are very moderate and any one of the aircraft would be a great value for the money.

If you are interested, give Bob a call at 612-964-8877, or see him at a meeting.



FAA Remote Identification

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In the model aircraft world, I am not aware of any kit or ARF manufacturers that are incorporating remote ID into their aircraft as yet. I think this is occurring for two reasons: 1) the cost of a remote ID module is between \$70 and \$200, and would add significantly to the cost of most aircraft kits; and 2) the FAA does NOT require that each aircraft be equipped with remote ID. Rather one approved and registered remote ID can be moved from one model to another. So, for the most part, the kit manufacturers will put the burden of cost on the pilot instead of on the kit. I think this is probably a logical and cost-effective way to achieve FAA compliance.

There are essentially two types of remote ID devices that can be purchased: 1) Stand-alone devices that have their own battery and when charged are switched on and connected to the aircraft; and 2) devices that must be plugged into the aircraft and derive their power from the airplane's battery. As you would expect, units having their own power system will be more expensive than those that rely on the plane's power.

Both Sally French (DroneGirl on the Internet) and The Pilot Institute did research into the available approved remote ID modules, looking at cost, ease of use, transmission distance and actually rating them. The Pilot Institute went one-step further and

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actually tested and rated the apps that are available for your phone to detect and identify remote ID transmissions.

First let's look at the stand-alone units that contain their own battery system:



DroneGirl Sally French rated the Zing Z-Rid broadcast module as the best overall remote ID she looked at. This unit weighed only 35 grams, charged through a USB-C cable (included) and mounts to your aircraft with a 3M Velcro lock. It is made by the American company Zing in San Jose, CA. It is not sold through third parties but rather must be purchased from Zing's website directly. Cost is \$199, but using Sally's coupon code DRONEGIRL, can be purchased for \$179.



Sally rated Zing's Z-Rid Lite as the best budget pick. Although she rated Zing's flagship product as best overall, it is still not cheap. In

January, 2024 Zing did something incredible by offering a version of their best-selling module at a lower price. The Zing Z-Rid Lite costs only \$85. Again very simple to use: charge it, turn in on, mount it on plane vour and vou are broadcasting from your drone. The major difference between the two Zing modules is the original has a 14-hour battery life whereas the Lite has only a 4-hour life. To me, for the price difference, the Lite is the way to go. One minor problem is that the Lite module will not start to ship from San Jose until mid-March.



When it comes to units requiring battery power from the aircraft, there were lots of products and lots of reviews. Prices ranged from as low as \$40 to as much as \$200 or At this point in time more. however, it seemed prudent to go with a well-known and trusted name in the industry, and that is Spektrum. Spectrum manufactures the Sky Remote ID Module. It is FAA compliant and FCC certified. It weighs only 14 grams requires an input voltage of 3.3v to 9v to operate using a 3-pin or 4-pin connector and can be easily moved from one aircraft to another. It transmits aircraft ground speed, altitude. position, heading, distance, time, and its unique serial

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number. Price on the internet can be found from \$69 to \$99, dependent on the seller.

It is interesting to note that Futaba has the FRID-1 remote ID module for the Japanese market, but it is not certified for use in the US, nor does it comply with the requirements put forth by the FCC/FAA. FutabaUSA has no timeframe on when or even if a US market device will be developed.

Once you purchase your remote ID device, remember that device MUST be registered on your FAADroneZone registration dashboard. This is an easy process to do, treating the remote ID device as just another drone to be registered. See the article in this newsletter on page 6 giving you a step-by-step procedure in registering your remote ID device with the FAA.

The Pilot Institute also reviewed Drone Scanner Apps that are available to detect remote ID transmissions. 'Drone Scanner' and 'Dronetag' are apps available for iphone. 'Drone Scanner', 'Air Sentinel' and 'OpenDroneID OSM are available for android. I think that all of the apps are free downloads. The Institute said that the Drone Scanner app consistently detected drones at longer ranges, with Air Sentinel being a close second. The Dronetag came in last. It should be noted that the average range of detection was only about

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1,000-feet and with the maximum detection being just under 5,000 feet. So, the maximum detection was still less than one mile! That does bring to question the overall effectiveness that remote ID may be as an enforcement tool by the FAA.

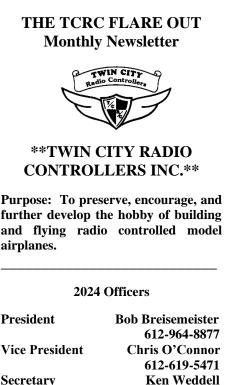
Remember, the clock is ticking. Deadline for UAS flights without a certified remote ID device is March 16th unless you are flying at a FRIA. Don't delay. Purchase your FAAcertified and approved remote ID device today and be compliant with this important regulation. The FAA fines can be severe if a pilot is in violation of this regulation.

The FAA is involved now in most aspects of our recreational flying. We must have a current FAA registration at FAADroneZone, we must have our FAA registration card on our person when we fly, we must have our FAA registration number on every UAS that we fly, and we must have a remote ID module in any aircraft that we fly unless we are flying at an FAA-Recognized-Identification-Area (FRIA) \odot

Lock The Gate!

It is very important that the gate to the field be kept locked at all times when there is no member present.

It is every member's job to lock the gate when he/she is the last one at the field. It doesn't matter the time of day or how nice the weather is. This simple rule is to keep the gate locked to prevent theft, vandalism and the unauthorized use of our land from occurring.



18304

TCRC Flare Out

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Treasurer

If someone were injured at the TCRC flying field and you had to call 911, what would you tell the operator for the location of the emergency? You would tell the operator the fire number for our field: 18304.

For safety reasons, it is very important every member knows our fire number. Hopefully we will have the fire number prominently displayed in the shelter at the field in the very near future.

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952-500-3446

952-941-5357

Tim Wirtz

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Calendar
End of Winter Fun Fly, Jordan Field 10-10-10 Rule
TCRC Membership Meeting, 7:00 PM CrossPoint Church Bloomington, MN
FAA Remote ID Enforcement
Duluth/Superior R/C Auction 6:00 AM Registration 9:00 AM Auction
9:00 AM Auction Gnesen Community Center, Duluth, MN
TCRC 2 nd Quarter Board Meeting 7:00 PM President Bob's Home
April Fools FunFly TCRC Jordan Field 10-10-10 Rule
TCRC Membership Meeting, 7:00 PM CrossPoint Church Bloomington, MN
TCRC Spring Float Fly
Bush Lake Park Bloomington, MN Steve Meyer
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It was reported at the January membership meeting that Jeff Tolzmann and Dave Erickson were going to order some bulk glow fuel and will make it available to TCRC members.

15% Nitro will be \$19/gallon and 20% Nitro will be \$24/gallon. It would be helpful if you would supply your own gallon bottle, but if you do not have one they may have some.

For more information contact either Jeff Tolzmann or Dave Erickson via phone or email, or by seeing them at a meeting. \odot



TCRC meets every month on the 2nd Tuesday at 7:00 PM in Fellowship Hall of CrossPoint Church located on the southeastern the corner of intersection of 98th Street and France Avenue in Bloomington. Guests are welcome to attend these meetings.



FAA Grants AMA National Authorization

AMA Government Affairs Team

In an email to AMA club Contest Directors, Event Managers and Club Officers, the AMA Government Affairs team gave an update on the latest developments concerning AMA-sanctioned events and the FAA remote ID requirement.

The email, dated February 29, 2024 stated:

Recently, the FAA granted the AMA a National Authorization that allows members at AMAsanctioned operate events to without broadcasting Remote ID information. This means that if you are hosting a sanctioned event that is not taking place at an FAA-Recognized Identification Area (FRIA) site, participants will not need to affix a broadcast module to their aircraft in order to meet the Remote ID requirement, just like those whose event is taking place at a FRIA site.

In order to qualify for this Remote ID authorization, the CD/EM is required to file a NOTAM within 7 days prior to the event and send the NOTAM number they are given to AMA at <u>waivers@modelaircraft.org</u>. AMA will then send the CD/EM a Remote

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Registering Your Remote ID Module With The FAA

by Jim Cook

As of March 16, 2024, all persons piloting a UAS (Uncrewed Aircraft System) must have an FAA-approved Remote ID Module in any aircraft that is in the air, unless they are flying at an FAA-Recognized Identification Area (FRIA). The article on page 1 of this newsletter gives detailed information on how a pilot complies with this regulation.

You do not have to have a remote ID module for every device that you fly. One module may be

ID authorization certificate to keep at the event in case it is requested by law enforcement or an FAA representative.

For more information, including NOTAM deadlines, how to file a NOTAM, and FAQs, please visit <u>https://amablog.modelaircraft.org/am</u> agov/2024/02/27/faa-grant-national-authorization-for-ama-sanctioned-events/.

Thank you,

AMA Government Affairs Team

This is great news! With this AMA National Authorization, events such as TCRC's Spring Float Fly will be able to be held without the requirement of Remote ID, as long as the NOTAM has been filed and the AMA authorization certificate has been received by the CD.

transferred to each of your aircraft prior to a flight.

However, that remote ID module must be registered on your page at **FAADroneZone**.

An official website of the United States govern

United States Department of Transportation



To register your remote ID module:

- Log into **FAADroneZone**. Click on the button labeled "Launch Drone Owners and Pilots Dashboard".
- Click on "Manage Device Inventory".
- Click on "Add Device".
- Answer the Remote ID question "Yes".
- Choose the device type from the drop down menu (Remote ID broadcast module or Standard Remote ID drone).
- Enter the Remote ID serial number (NOTE: this number may be listed on either the device or the controller.)

It is that easy. Remember, EACH remote ID module that you own must be registered in this way.

March 16^{th} is here now. So, make sure you comply completely with the FAA regulations that govern our R/C hobby.

Webmaster Tom Hall will be adding a link to TCRCOnline.com to reach **FAADroneZone**.

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Arado AR 199

by Conrad Naegele

The February Mystery Plane was the German Arado AR 199.



The Arado was designed to meet the requirement calling for a light float plane suitable for initial and basic training of navigators and radio operators.

Two prototypes were presented and flown in 1939, and much of this design was based on an earlier plane. The new plane was basically allmetal, the forward fuselage was welded steel tubing with light alloy skinning, and the wing was a single-spar, again with light dural alloy, and the movable surfaces fabric-covered.

Side-by-side seating was provided for pilot and student, and a third seat was provided for a radio operator. Flight trials were extremely successful, but then it was decided that a float plane of his type was not needed, and further work was disbanded, and no production followed. However, the two prototypes were delivered to the Luftwaffe, and they were used into WWII!

The Arado AR 199 was powered with an Argus 12-cylinder inverted newsletter. Vee, liquid-cooled engine that developed 450 horsepower. Its wingspan was 41-feet, 8-inches and it had a speed of 161 mph.



New Member

At the February meeting TCRC gained its newest member.

Al Kracke lives at 4241 Victoria Street in Minnetonka, 55345. His phone number is 612-501-2145 and his email address is <u>krackea@hotmail.com</u>. Al has been flying R/C for 5 years and currently is in the market for a new electric airplane.

When you see Al at a meeting or at the field, be sure and introduce yourself and welcome him to TCRC.

That brings our 2024 membership to 91 members.

Show & Tell Data Form

Bringing a plane to the TCRC meeting for Show & Tell?

If you are, be sure to go to the club website TCRCOnline.com and print out a blank Show & Tell Data Form. Fill this out and make sure it gets to the newsletter editor, Jim Cook so that the correct information shows up about your new airplane in the newsletter.

Also, if Jim is not at the meeting, make sure someone takes a picture of your new masterpiece and emails the picture to Jim also. If he is not at the meeting, you can have someone take a picture of the completed form and email that picture to him also.

2024 R/C and Aviation Events of Interest

Date	Event	Remarks
June TBD	Discover Aviation Days 2024	Anoka County Airport, Blaine, MN
July 11-13	Windy City Warbirds and Classics	St. Charles, Illinois
June 14-15	Minnesota Jets 2024 AMA Membership Required, AMA Turb Will Apply, EDF's Are Welcome, Power	
June 28-30	AMA National Fun Fly 2024 Contact Randy Cameron, (417) 830-921	Muncie, Indiana 1 nationalfunfly@modelaircraft.org
June 27-29	Air Supremacy Over Goshen 2024 Goshen Municipal Airport, Flying Daily Military and Veterans Free, Info at www.	
Postponed to 2025	Wings Of The North AirExpo 2024	Flying Cloud Airport, Eden Prairie, MN
July 1 to Aug. 9	AMA NATS 2024	AMA National Flying Site, Muncie, IN
July 1-5 July 7-12 July 11-14 July 16-19 July 20-28 July 22-26 July 29-Aug. 2 August 4-7 August 4-9	Indoor Free Flight R/C Pylon Racing R/C /CL Scale R/C Scale Aerobatics R/C Soaring Outdoor Free Flight R/C Aerobatics R/C Helicopter Control Line (Except CL Scale)	Moscow, Idaho AMA National Flying Site, Muncie, IN AMA National Flying Site, Muncie, IN
July 22-28	EAA AirVenture Oshkosh 2024	Oshkosh, Wisconsin
August 8-10	Northern Alliance Military Fly-In Registration Open In April, Military Giant-Scale (Wingspan 80" or more), Classic Non-Military Pre-1960 Aircraft Allowed if Giant-Scale, 9 am – 5 pm, After 5 pm Warbirds of Any Size May Fly	
August 15-18	Warbirds & Classics Over the Midwest Registration is Now Open, Giant-Scale M Aircraft, Sunday, August 18 th is an Open	•

TCRC 2024 Dues Renewal Statement

By Tim Wirtz

Your 2024 TCRC club renewal is now due. All current members should have received an email 2024 Dues Renewal Statement directly from treasurer Tim Wirtz. Before your renewal application can be processed by TCRC, your 2024 AMA Membership must be current. A 2024 Membership Card will not be issued until the AMA website shows your AMA status as current. Your 2024 AMA Membership status will be verified using an AMA website application. There is no need to submit a paper copy of your AMA Membership status with this application.

To serve the TCRC membership, the Board requires a signature of each pilot confirming their intent to abide by the Field Rules that are posted on the TCRC Website (<u>http://www.tcrconline.com/documents/field_rules.htm</u>) and in the shelter at the main field. Your payment of your yearly dues constitutes your acknowledgment that you intend to abide by the Field Rules

TCRC Membership types are as follows:

Regular	Those 19 years or over as of July 1, 2024
Family	Regular member plus all son(s)/daughter(s). Pilots under 19 years of July 1, 2024, must have a current 2024 AMA Membership
Junior	Those under 19 years as of July 1, 2024 (who are not part of a Family Membership)
Social Affiliate	An affiliate of TCRC with no flying privileges (does not require AMA Membership)

The 2024 Membership dues are listed below. Early Renewal applications must be post-marked or received electronically by 15 January 2024. **Receipt of payment is proof of renewal. NO NEED TO PRINT AND SEND THIS FORM**

	Renewal
Regular Membership	\$105.00
Family Membership	\$105.00
Junior Membership	\$ 47.50
Social Affiliate	\$ 35.00

If you had a Family Membership in 2024, your family membership will automatically be renewed as such with the family members on file. If there are additional family members that need to be added, please email treasurer@tcrconline.com.

Cash, Check, PayPal and Credit Card are accepted forms of Payment. If paying via PayPal or Credit Card, a \$3.00 convenience fee will be added.

If paying by PayPal, use the following links(the \$3.00 Convenience Fee is automatically added):

Renewal Site:

- www.PayPal.Me/TCRCTreasurer/10 8

If paying by Credit Card, please call Tim Wirtz at 952-297-5226

Mail your check payment to (do not send cash):

Tim Wirtz 1511 Emerson Ave N Minneapolis, MN 55411

Renew your TCRC membership dues today.

Flying Season Has Arrived!

For Minnesota, this past winter will probably be remembered as 'the winter that never was'!

Here it is barely March, and no snow and warm temps. Time to get all of those airplanes you picked up at the TCRC Annual Auction in February and get them ready to fly. Take advantage of this early spring! Get out and get flying!

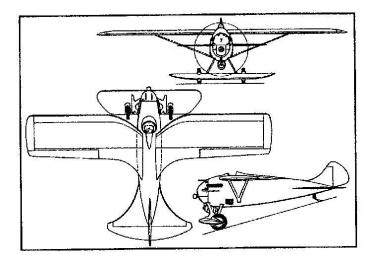
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March Mystery Plane



Minnesota River Report

It is a bit early to start watching the National Weather Service's Hydrologic Prediction Guide for the Minnesota River at Jordan, Minnesota, but with the lack of snow and the very warm temperatures we have experienced in January and February, water movement in the Minnesota River might be early this year.

As of March 1st, 2024, the Minnesota River at Jordan is at 6.25 feet. There is really no snow in the western part of Minnesota that would drain into the Minnesota River, so the only contributor to its water level will be snow and rain that occurs in March.

March is historically a snowy and rainy month, but without any snowmelt to be added to those March levels, the outlook should be pretty good for the TCRC Jordan Flying Site this spring.

Twin City Radio Controllers



