

## SAREX/ARISS SCHOOL APPLICATION

Congratulations on taking the first step toward a rewarding experience for your school. The Space Amateur Radio Experiment (SAREX) and Amateur Radio on the International Space Station (ARISS) requires that each school submit an application so that your school can be scheduled. Please fill in the below requested data as best as possible. Be assured that the data you supply will be held in confidence by the American Radio Relay League, The Radio Amateur Satellite Corporation (AMSAT), and NASA. While data, such as the home phone number of the school principal may seem private, past experience has shown that when the SAREX and ARISS planners need to contact anyone from the school, the more names and phone numbers, the better. In the fast-paced world of SAREX and ARISS, radio contact opportunities or NASA scheduling changes may occur with only a few days notice and the need to make contact with someone from the school becomes very important. It is anticipated that most of the radio contacts will be with the International Space Station; however, if a shuttle mission with ham radio on board is planned, then your contact may occur with the shuttle.

If you are from outside the United States and Canada, please enter your country code and city code as part of the telephone number for any voice, fax, or cellular phone.

### 1. SCHOOL

Name: Greenfield Central High School                      Address: 810 N. Broadway St.  
City: Greenfield  
State: Indiana  
Zip or Postal Code: 46140  
Country: USA  
Phone #: 317-462-9211  
Fax #: 317-467-6723  
Email Address: sbryant@gcsc.K12.in.us

### 2. Principal

Name: Mr. Steve Bryant  
School phone #: 317-462-9211      School Fax #: 317-467-6723  
School email address: sbryant@gcsc.K12.in.us  
Pager #: 317-240-9538  
Home phone # 317-462-0725  
Home Fax #: na  
Cellular phone #: 317-498-0237  
Home email address: na  
Home address: 497 Founders Drive  
Home City: Greenfield  
Home state: IN  
Home Zip or Postal Code: 46140  
Home Country: U.S.A

### 3. Coordinating Teacher:

Name: Mr. Gary Wynn  
Grade Level/Subject Taught: 9-12 /Transportation      School phone #: 317-462-9211  
School Fax #: 317-467-6723  
School email address: gwynn@gcsc.K12.in.us  
Pager #: NA

Home phone #:317-326-3094  
Home Fax #: NA  
Cellular phone #: NA  
Home email address:  
Home address: 2756 E. 625 N.  
Home City: Greenfield  
Home state: IN  
Home Zip or Postal Code: 46140 USA

**4. Has the school previously been selected for a shuttle, Mir, or ISS contact?:**

(YES or NO): NO If YES, which mission? STS: or Astronaut on Mir or ISS:  
Date of contact:

**Did the school have a complete contact: If No, please explain why not:**

**5. RADIO CONTACT COORDINATOR**

(To be filled out by an Amateur Radio operator)

Name: Gary S. Stouder  
Call Sign: K9SG  
Home address: 30 Paul's Ct  
Home City: Greenfield  
Home State: Indiana  
Home Zip or Postal Code: 46140  
Home Country: USA  
Work Phone #: 317-462-3593  
Home Phone #: 317-462-1232  
Pager #: NA  
Cellular phone #: NA  
Home Fax #: NA  
Home email Address: [K9SG@AMSAT.ORG](mailto:K9SG@AMSAT.ORG) or garystouder@home.com  
Work Phone #: 317-462-3593  
Work Fax #: 317-462-8010  
Work email address: NA  
Experienced With Satellite Operations? (YES or NO): YES WORKED ALL STATES

**DATA ABOUT SITE OF RADIO CONTACT**

**6. Site of Radio Contact location information:**

Latitude [Use decimal format] (South is negative): 39 deg 47.475 min  
Longitude [Use decimal format] (West is negative): -85 deg 46.95 min  
Elevation [Use meters above mean sea-level]: 290  
Address: 810 N. Broadway St.  
City: Greenfield  
State: IN  
Country:U.S.A.

**7. Radio Coordinator During Contact:**

Name: Gary S. Stouder  
Call Sign: K9SG  
Home address: 30 Paul's Ct.  
Home City: Greenfield  
Home State: Indiana

Home Zip or Postal Code: 46140  
Home Country: USA  
Work Phone #: 317-462-3593  
Home Phone #: 317-462-1232  
Pager #:  
Cellular phone #:  
Home Fax #:  
Home email Address: K9SG@AMSAT.Org  
Work Phone #: 317-462-3593  
Work Fax #: 317-8010  
Work email address: NA  
Experienced With Satellite Operations? (YES or NO): YES

**8. Call Sign at contact site: W9ATG**

**9. Contact site Phone #: 317-462-9211**

**10. Contact site cellular phone #: NA**

**11. Contact site Fax #: 317-467-6723**

**12. Contact site Time Zone:**

Does Your Area Go To Daylight Time? (YES or NO): NO  
Hours before or after UTC: - 5

**13. Language To Be Used During Contact: English**

**14. Are Weekends, Holidays or Nights A Problem For Your Contact?: (YES/NO)**

YES it would be better to have it during a school day if possible. School starts the 3<sup>rd</sup> week in August. We have Thanksgiving off and usually 5 days before Christmas until after New Years day. We generally have spring break in the 3<sup>rd</sup> week of March and school lets out at the end of May.

To aid the contact planners, please provide dates for major holidays, school year, or other known problem dates. As it may be several years before your school is selected and the actual dates may change from year to year, please be as descriptive as possible, i.e. school starts the third week of August, holiday is the fourth Thursday of the month, etc.

**15. ASSISTING LOCAL AMATEUR RADIO CLUB**

(To be filled out by the Amateur Radio club)

Name Of Amateur Radio Club: Hancock Amateur Radio Club (W9ATG)  
Club Contact Person: Gary S. Stouder      Contact Person's Call Sign: K9SG  
Contact Person's home phone #: 317-462-1232  
Contact Person's work phone #: 317-462-3593  
Contact Person's pager #: NA  
Contact Person's email address: garystouder@home.com  
Is the club experienced With Satellite Operations? (YES or NO): YES  
National amateur radio organization (if club is a member of a national organization such as the ARRL): ARRL

**16. STATION AND EQUIPMENT DATA**

(To be used during SAREX or ARISS Amateur Radio contact)

It is suggested that 2 complete radio stations be set up. It is also suggested that redundant power sources be provided, i.e. separate ac circuits and battery back-up. OUR BACKUP WILL BE MY OWN YAESU FT-847 AND MY HOME COMPUTER WITH A BATTERY SUPPLY. I HAVE A COMPLETE STATION AT HOME IF IT WOULD BE BETTER TO HAVE IT READY, BUT IT WOULD BE DIFFICULT TO TRY AND OPERATE FROM 2 DIFFERENT POSTIONS.

#### **Radio Station #1**

Transceiver To Be Used (Manufacturer/Model): Yaesu FT-847  
Does it have Memories? (YES or NO): Yes  
Output Power (Watts): 50  
Frequency Range (MHz): 1.8 to 448 Mhz  
Station Equipped With a RX Preamplifier? (YES or NO): YES  
If YES, Manufacturer and Model of Preamplifier: RF Concepts 2-417  
Station Equipped with a TX Amplifier? (YES or NO): Yes  
If YES, Manufacturer and Model of Amplifier: RF Concepts 2-417  
If YES, Maximum Output Power of TX Amplifier (Watts): 160  
Is the Radio capable of a Non-Standard Split? (YES or NO): Yes  
Antenna Type (VERTICAL, SATELLITE (AZ/EL?), OTHER) [specify]: AZ/AL  
If commercially built, manufacturer and model: M2 22el 2mcp22  
Antenna Gain (dbd or dbi): 12db  
Number of Elements: 22  
Polarization (HORIZONTAL, CIRCULAR, or VERTICAL) CIRCULAR  
Antenna Equipped With a Rotator? (NONE, AZIMUTH ONLY, or AZ/EL): AZ/EL  
Satellite Tracking Program Available? (YES or NO): YES  
If YES, Name of Tracking Program: NOVA FOR WINDOWS  
Do you have Automatic Antenna Control? (YES or NO): YES  
VHF Packet Capability? (YES or NO): NO NOT A SITE  
VHF SSTV Capability? (YES or NO): YES  
Do you have phone patch capabilities?: NO BUT CAN DO IF NECESSARY

#### **Radio Station #2**

Transceiver To Be Used (Make/Model): Yaesu FT 847  
Does it have Memories? (YES or NO): Yes  
Output Power (Watts): 50  
Frequency Range (MHz): 1.6 to 450  
Station Equipped With a RX Preamplifier? (YES or NO): Yes  
If YES, Manufacturer and Model Of Preamplifier: RF Concepts 2-417  
Station Equipped with a TX Amplifier? (YES or NO): YES  
If YES, Maximum Output Power of TX Amplifier (Watts): 50  
Is The Radio Capable Of a Non-Standard Split? (YES or NO): YES  
Antenna Type (VERTICAL, SATELLITE (AZ/EL?), OTHER) [specify]: AZ/EL  
If commercially built, manufacturer and model: M2 2MCP22  
Antenna Gain (dbd or dbi): 12  
Number of Elements: 22  
Polarization (HORIZONTAL, CIRCULAR, or VERTICAL) CIRCULAR  
Antenna Equipped With a Rotator? (NONE, AZIMUTH ONLY, or AZ/EL): AZ/EL  
Satellite Tracking Program Available? (YES or NO): YES  
If YES, Name of Tracking Program: NOVA FOR WINDOWS  
Do you have Automatic Antenna Control? (YES or NO): YES  
VHF Packet Capability? (YES or NO): YES  
VHF SSTV Capability? (YES or NO): YES  
Do you have phone patch capabilities?:NO

**17. Please note any antenna obscuration data (modify to meet location's specific needs):**

Azimuth degrees                      Elevation degrees

0 (North)	
45	5 DEGREES
90 (East)	5 DEGREES
135	8 DEGREES
180 (South)	0
225	0
270 (West)	0
315	0
360 (North)	5

For example:

Azimuth degrees	Elevation degrees
0 to 50	0
50 to 90	15
90 to 100	30
100 to 140	5
140 to 280	10
280 to 360	5

**18. Do you plan to do a live re-transmission? If so, how and on what frequency and mode?**

We can retransmit on our local repeater or on an arranged HF frequency. We will be transmitting live on radio station WRGF 89.7 Mhz and also Cougar Television, which is a cable TV station that originates from our school and covers our entire county. We would also be able to put NASA Select on the Television and would very much like to have a live video feed of the astronauts talking to us from there to send out on the cable station. We could also arrange SSTV uplink on some frequency or even regular ATV with 100 watts to be sent if it could be received on the 70 cm band.

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