ARISS Moderator Script Generator Tool - READ ME File

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Goals

This tool helps create an ARISS Moderator Script used for ISS school contacts.

The goals of this tool are to:

1. Have good consistent formatting that is easy to read and follow.
2. Have all the checklists and important details included.
   These are often not included in ARISS scripts, thus more ad-lib.
3. Automate filling out the template to ensure accuracy.
4. Automate the calculation of the event timeline. No manual time math!
5. Produce an event timeline outline to support event planning.
6. Allow for easy customization for contact needs.
7. Speed up the script generation time.
8. Provide predictability for mentors and moderators.

Disclaimer

This free software is provided as is.

How It Works

Two files are needed to get started; a moderator script template in MS-Word `docx` format, and a completed text file form containing the values of needed variables. The Python script basically works like a mail merge to populate the template with the variable values (such as names, callsigns, etc.) set in the form file. It also takes care of the script timeline and does time math.

Two files are generated; the moderator script in MS-Word `docx` format, and an event outline text file. The outline is useful in finalizing the event plan. It maps out the start time for each event block, planned durations, and time to ISS rise of the given event block. The file is easy to e-mail.

The outline time calculations use the start of the conference time and the ISS rise time as anchors. The calculations assume typical time durations for ARISS related activities, such as audio checks, and ARISS program. The school/group program start time and duration are calculated as a remainder of time left after accounting for the ARISS portions of the event. The baseline durations are specified in the form file and can be changed if needed.

Setup

Before you begin, make sure things are set up correctly.

1. From GitHub download the files as a Zip file, and unzip.

2. In a folder called `ARISS_mod_script_gen` make sure the following files are present:

   - `ARISS_mod_script_form_blank.txt`
   - `ARISS_mod_script_temp_master.docx`
     There could be multiple master template files to choose from, or they could be in a folder called `Templates`.
   - `ARISS_mod_script_gen.py`
   - `README.md` and/or `README.pdf` (this file)
   - `HELPER.md` and/or `HELPER.pdf`

3. This tool requires that Python 3.x is installed.

   - See `https://www.python.org/downloads/`

4. The Python script requires the `docxtlp` library.

   - See https://pypi.org/project/docxtpl/

Instructions and Work Flow

1. MAKE a working script template file.

   - COPY the desired master template file to be used (i.e.
     `ARISS_mod_script_temp_master.docx`) and name it as `ARISS_mod_script_temp.docx` .
     The working template needs to be in the same folder as the Python script. The working
     template will be edited.

   - There is a useful checklist on the last page of the template file.

2. MAKE a working input form file.

   - COPY the file `ARISS_mod_script_form_blank.txt` and name it
     `ARISS_mod_script_form.txt` .

   - Running the Python script generates a new clean form file named
     `ARISS_mod_script_form_blank.txt` to ensure there is a blank form available.

3. COMPLETE the text file form, `ARISS_mod_script_form.txt` .

   - This should be done by the mentor and/or moderator. There are instructions within the file.
     Fill out as much as you can, or needed, using a text file editor.

   - To get a usable or first draft outline, only the `Script version` , `Important Dates and
     Times` , and the `School/group name` need to be completed in the form file.

4. EDIT the working template file `ARISS_mod_script_temp.docx` , not the `master` .

   In general the provided templates should be sufficient to cover the needs for a contact without
   much editing. Edits should be based on the plans for the contact in terms on event flow and
   planned components, such as videos and school/group program.

   - Paste in the questions from ARISS Op Uplink file.

   - OK to edit the script text and add/remove cues and notes as needed.
     (See dictionary of variable below.)

   - OK to removed unused/optional blocks, such as the videos.

   - Remove the red colored text script notes.

   - Do NOT add more event blocks or change the event block names.

5. RUN the Python script using an IDE or at the command line.
   See the `HELPER` file for information on running Python.

   - The two input files must be in the same folder as the Python script. The files must have the following names:

     - Working template: `ARISS_mod_script_temp.docx`
     - Working form: `ARISS_mod_script_form.txt`

   - Command line: `python ARISS_mod_script_gen.py`

   - You will see some messages scroll across the screen. There is limited error checking. It will report success if there were no errors.

   - Two new files will be generated. If they already existed, they will be overwritten. These are the final product files.

     - `ARISS_mod_script_<short_name>_V<ver#>.docx`
     - `ARISS_mod_script_outline_<short_name>_V<ver#>.txt`

6. OPEN the new moderator script file and review it for completeness and correctness. If changes are needed, there are three ways to handle them.

   - Just edit the moderator script directly and save. This is best path for minor edits if no more edits are anticipated and the Python script will not be re-run.

   - Edit the working template file and rerun the Python script. A new `docx` file will be created and overwrite the old one. A new outline file will be generated, overwriting the old one.

   - If it is related to a variable, update the form text file and rerun the Python script. A new `docx` file will be created and overwrite the old one. A new outline file will be generated, overwriting the old one.

7. UPDATE. If a version of the moderator script was distributed and needs to be updated, there are two ways to handle this.

   - Just edit the generated script `docx` file directly. Be sure to change the version number on script cover page. Save with a new filename changing the version number. This is a good option for minor final edits.

   - If it is related to a variable or a change in the timeline, update the form text file. Be sure to update the version number variable in the form. Then rerun the Python script. A new `docx` file will be created along with a new timeline report file.

Notes About the Moderator Script Template Format

- The script template file must be in MS-Word `docx` format (not `doc`). These files can be edited with MS-Word or Libre Writer. If using Libre Writer, be sure to save in the `docx` format.

- The MS-Word `docx` script template file needs to have variables inside double braces, i.e. `{{variable}}` . The form text file maps all the variables to their values. Only use variables that are listed below.

- The moderator script is divided into event blocks. Do NOT reorder.

- Typical durations have been established for ARISS blocks. The durations are specified in the form and can be changed if necessary.

- The event blocks in the script are in a one column table. Each event block is in a row. The table is set up so that page breaks are not permitted within a row. This keeps each event block together on the same page, helping with readability and flow during the event. It is very helpful to turn on the "view table gridlines" feature to see the hidden boarders.

Dictionary of Script Document Variables

Below is the list of variables that are supported by the Python script. The variables take the form of double braces around a variable name (i.e. ISS callsign variable is `{{ISS_callsign}}`). The variables can be placed anywhere, and repeated, in the `docx` moderator script working template document. It is not necessary to use all of the available variables in a script. However, if additions are needed, the Python script would need to be updated. Note that some variables are specified in the form file, while others are generated by the Python script.

Script version

Script version: `{{version}}`

School/Group Information

School/group name: `{{school_group_name}}`
School/group location: `{{school_group_city_state}}`
Coordinator/teacher at venue: `{{school_coordinator_name}}`
Venue phone number: `{{school_coordinator_phone}}`
Emergency back-up phone number: `{{school_coordinator_backup_phone}}`
School principal name: `{{principal_name}}`
School teacher name: `{{teacher_name}}`

ISS Information

Astronaut name: {{astronaut_name}}
Astronaut callsign: {{astronaut_callsign}}
ISS callsign to be used: {{ISS_callsign}}

ARISS Moderator, Mentor, and Tele-bridge Information

Moderator name: {{moderator_name}}
Moderator callsign: {{moderator_callsign}}
Moderator phone number: {{moderator_phone}}
Moderator will be On-site/Remote for the contact: {{moderator_location}}
Mentor name: {{mentor_name}}
Mentor callsign: {{mentor_callsign}}
Mentor phone number: {{mentor_phone}}
Mentor will be On-site/Remote for the contact: {{mentor_location}}
Tele-bridge station callsign: {{telebridge_callsign}}
Tele-bridge station location: {{telebridge_location}}
Tele-bridge station telephone number: {{telebridge_phone}}
Tele-bridge operator name: {{operator_name}}
Tele-bridge operator callsign: {{operator_callsign}}
Tele-bridge operator phone number: {{operator_phone}}
Tele-bridge support name(s) and callsign(s): {{support_names_callsigns}}
Tele-bridge audio interface): {{audio_interface}}
Tele-bridge video interface: {{telebridge_video}}

ARISS Optional Videos

Contact from student perspective (Yes/No): {{student_video}}
Contact from ISS perspective (Yes/No): {{ISS_video}}

Live Streaming

Live steam planned (Yes/No): {{livestream_plan}}
Live stream operator name: {{livestream_name}}
Live stream operator callsign: {{livestream_callsign}}
Live stream operator phone number: {{livestream_phone}}

Fixed Timing

Contact date: `{{contact_date}}`
Start of conference in UTC: `{{conf_utc}}`
Start of conference school time: `{{conf_sch}}`
ISS rise time in UTC: `{{AOS_UTC}}`
ISS rise time in school time: `{{AOS_sch}}`

Calculated Timing

Event	Start Time	Duration	ISS Rise
Conference start time	`{{T01}}`	`{{D01}}`	`{{R01}}`
Ground station checklist	`{{T02}}`	`{{D02}}`	`{{R02}}`
Contact preparation checklist	`{{T03}}`	`{{D03}}`	`{{R03}}`
Practice run through w/students	`{{T04}}`	`{{D04}}`	`{{R04}}`
School/group program/slack time	`{{T05}}`	`{{D05}}`	`{{R05}}`
Start ARISS program	`{{T06}}`	`{{D06}}`	`{{R06}}`
ARISS introduction	`{{T07}}`	`{{D07}}`	`{{R07}}`
Video from student perspective	`{{T08}}`	`{{D08}}`	`{{R08}}`
Video from ISS perspective	`{{T09}}`	`{{D09}}`	`{{R09}}`
Introduce the ground station	`{{T10}}`	`{{D10}}`	`{{R10}}`
Handover to ground station	`{{T11}}`	`{{D11}}`	`{{R11}}`
ISS rise and AOS	`{{T12}}`	`{{D12}}`	`{{R12}}`
ISS Contact!	`{{AOS_sch}}`	-	-
ISS set and LOS	`{{T13}}`	-	-
Closing & end of ARISS program	`{{T13}}`	`{{D13}}`	-
Contact preparation duration	-	`{{D14}}`	-
Shool/group program duration	-	`{{D15}}`	-
ARISS program duration	-	`{{D16}}`	-
Total event duration	-	`{{D17}}`	-