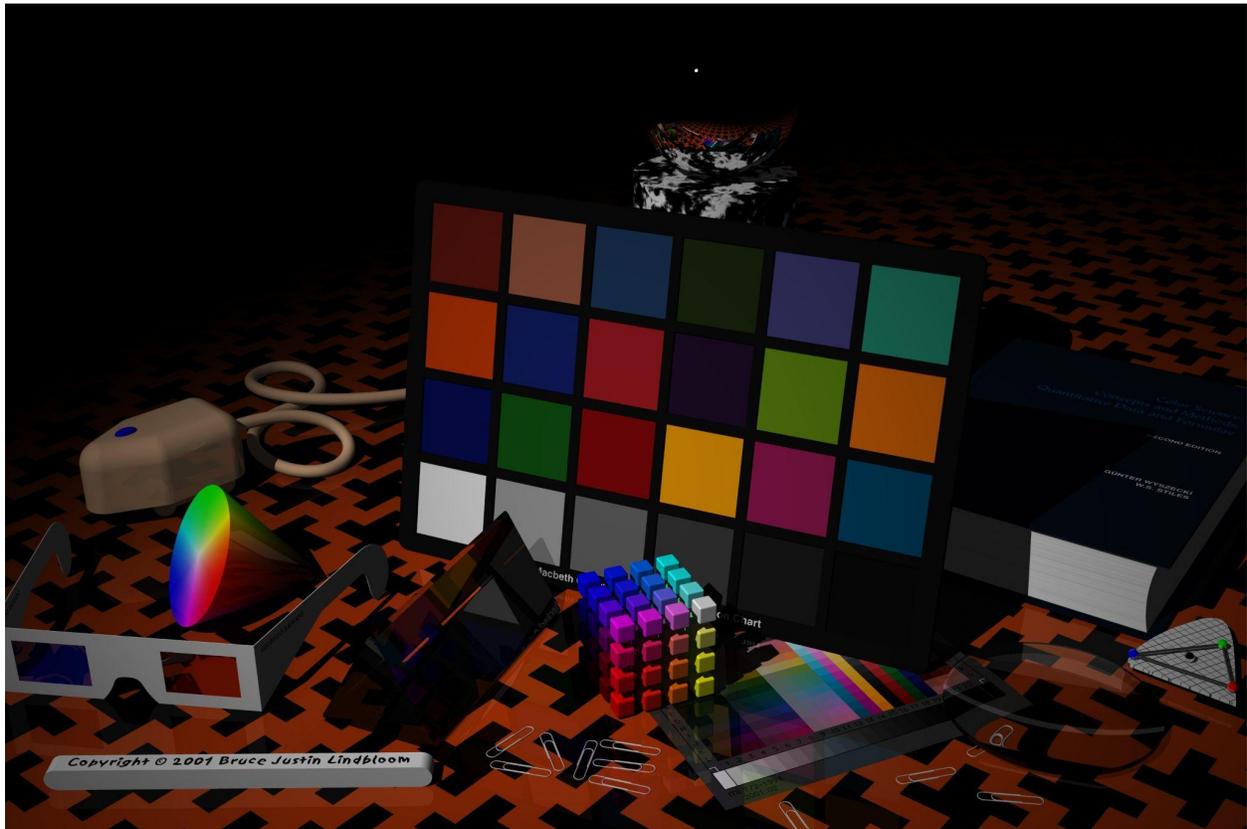


Notes on the 2022-06-09 Exercise

The stated goal of the exercise was to **crop** and **resize** a large, 1.4 Mbyte image



To a more manageable 5 kbyte size



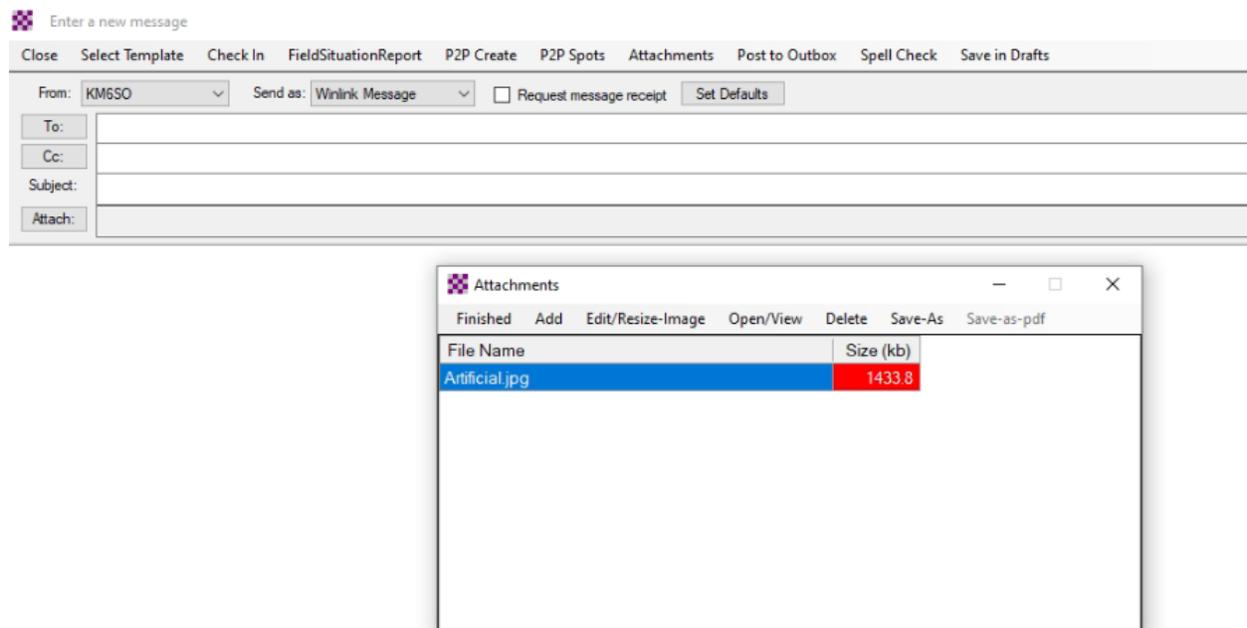
An unstated goal of the exercise was to see how well our participants could do with a minimal set of instructions. And you did pretty well!

Winlink Express provides a built-in tool that makes both cropping and resizing an easy task to accomplish. Our instructions provided a link on how to use the Winlink “Edit/Resize-Image” tool.

If you used anything other than the Winlink tool, **please, view this link:**

<https://youtu.be/886P6ygHm00>

Here’s a screenshot of how to get started – select the attachment you want to edit/resize and then hit the “Edit/Resize-Image” menu item and you’ll start the tool



The exercise instructions asked that you send a cropped, resized image via a Winlink Check In message.

We received 657 messages in total, including 604 Winlink Check In messages from 566 participants.

Of these 604 Winlink Check In messages:

- 588 (97.35%) included an image
- 531 (87.91%) included an images that was 5 kbytes or less
- 523 (86.59%) included an image that was **correctly cropped** (or “similar enough”) to the reference cropped-and-resized image (as shown above)
- 483 (79.96%) included an image that was both 5 kbytes or less as well as “similar enough”

So, while virtually everybody was able to send an image, only 80% of us were able to send an image that met the requirements for size and content. Using the Winlink tool really does make the image editing process easy. **If you didn't use it, try it.**

How did we determine if your image was correctly cropped and “similar enough”? We found an [implementation](#) of calculation of the [Bhattacharyya Coefficient](#) on the Internet and adopted it for our use. We found in our testing that setting a threshold of 98% similarity gave very good discrimination and I manually examined all 60 images at the 97% and 96% level and manually “promoted” 9 that were apparently edited with a non-Winlink tool, but were still 5 kbytes or under and were cropped to the correct area.

We also asked that you tell us how easy or hard you found this exercise by inserting a single digit (1 (easy) through 5 (hard) in the Comments field. Here's the result:

- 1 - 160 (28%)
- 2 - 196 (35%)
- 3 - 79 (14%)
- 4 - 29 (5%)
- 5 - 4 (1%)
- other - 50 (9%)
- no response - 48 (8%)

Most of you found this exercise relatively easy. In fact, many of you who had an “other” comment noted how easy it was to use the Winlink tool. However, 9% didn't include a comment that was just the single digit that we asked for in the instruction – these are the “other” responses.

As always, please take the time to **read and follow the exercise instructions**. I know it's tempting just to jump right in but reading and following the instructions would have directed you to use the Winlink image editing tool and to send a properly formatted comment. Those steps would have earned more of you a perfect grade.

Grading

The exercise instructions stated that the exercise would be graded, but in keeping with our “minimalist” approach, we didn’t state exactly how we would grade.

This is what we came up with for the grading "key". Numbers in (parentheses) are percent of responses marked correct:

25 points: image attached: (98%); any image image would do

25 points: image size < 6 Kbytes: (90%); 5000 vs 5*1024 bytes didn’t matter

25 points: image "similar enough": (89%); was the image correctly cropped

25 points: comments on difficulty: (83%)

We also awarded an extra credit of 10 "bonus" points for sending your message Thursday (UTC). After all, we do call these exercises **Winlink Thursday** for a reason. Over 73% of you did send your messages on Thursday and did earn that bonus. However, the maximum grade was capped at 100 points.

Here's the grading result:

100: 398 (70%)

85: 100 (18%)

75: 31 (5%)

60: 15 (3%)

50: 5 (1%)

35: 9 (2%)

25: 2 (0.4%)

10: 1 (0.2%)

0: 5 (1%)

Most (70%) of you were able to submit a properly cropped and sized image and included a properly formatted comment and earned that perfect score. Well done. Another 23% either had a problem with the image editing or providing a well-formed comment – that’s not too bad for our minimalist instructions.

Thanks to the 607 participants in this week’s exercise, especially the 26 first time participants. We hope you enjoyed the exercise and we look forward to working with you again soon.