



BASIC DIGITAL PHOTOGRAPHY for Auxiliarists

PRESENTED BY:

**D7 AUX Public Affairs and
Publications Departments**





Welcome

GOALS:

1. To increase the number of photo submissions to the PA/PB Departments.
2. To facilitate a better understanding by members of submission requirements.
3. To provide tips on how AUX Photographers can be successful.
4. Have fun!





Expectations

This presentation is not intended as a substitute for a photography course. It provides only the most basic information necessary to submit acceptable High Resolution images for printed publications such as newsletters, the *Breeze* or the *Navigator*.





Key Questions

1. Do I need to be an expert?
2. What are the requirements for submitting photos to the PA or PB Dept?
3. What technologies are available to make the AUX Photography process easier?
4. What are some tips for taking compelling photos?





Key Topics

- 1. Camera Settings**
- 2. Lighting and Composition Tips**
- 3. Downloading and Editing Photographs**
- 4. Writing Photo Captions and Credits**
- 5. Sending High Resolution Photographs in E-mails.**





Lesson #1

- **Most Auxiliarists are neither professional nor serious amateur photographers.**
- **We get that! You do not need to be either of the above to get your photos published.**





The Digital Advantage

1. **Cost (no film or developing).**
2. **Ability to view image immediately.**
3. **Capability to edit and transfer images electronically.**
4. **Highly compact and accessible (cell phones).**
5. **Everyone can be a photographer!**





Print vs Web Photos

- **Print and web resolutions are not the same. Images that good on a computer screen may look fuzzy, or highly pixilated, in print.**



Web



Print





Image Resolutions

- **Web Images are small. Web resolution is 72 dpi (dots per inch).**
- **Print resolution is high. Photos print best at 300 dpi.**
- **To get a good print quality image, you must set your camera to the highest resolution possible.**





Camera Settings

- **Make sure your camera is set to take the largest image size possible. Refer to your camera's documentation on how to do this.**

NOTE: Many of the examples provided will be based upon the Canon PowerShot S60® . While all digital cameras are different, they have similar functions and menus.

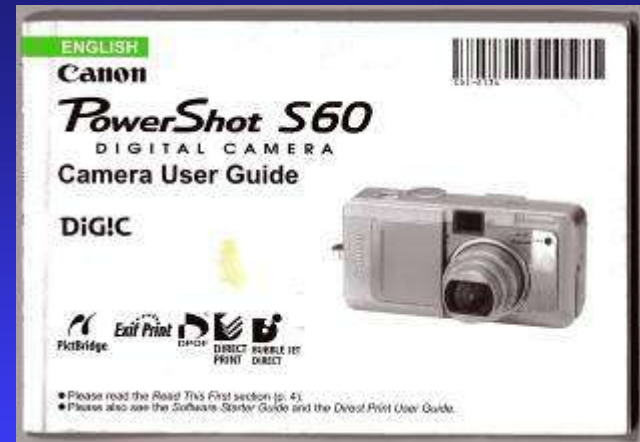
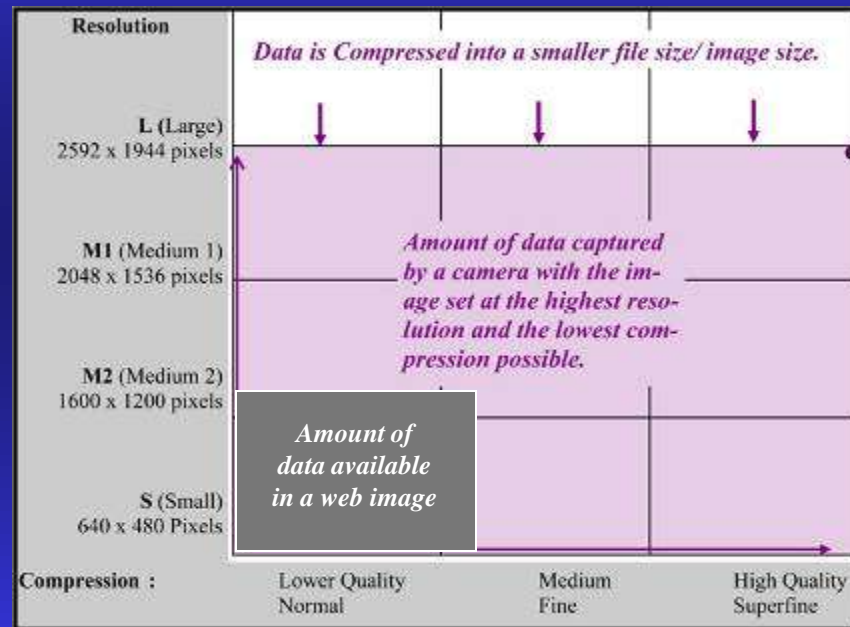




Image Compression

- As images are compressed, data is discarded to “fit” the image into a smaller file size.
- Once data is discarded, the file cannot be increased. A low resolution web-based image cannot be “resized” into a high resolution print image .





FAQ #1

“Why does my 5 MB produce only a 2 MB photograph?”

- When set on “Automatic” focus at the highest resolution and the lowest compression rate possible, a camera capable of capturing 5 MB (megapixels) of data will record a JPG image between 1 and 3 MB’s.
- The file/ image size increases with the amount of available light, hence; the amount of detail captured by the camera. The data captured by the lens is then compressed and saved as a JPG file.
- Maximum file size can only be achieved in advanced modes of capturing and saving image data. They are not saved as JPG but as other file types (RAW, DNG, etc.).

Shoot in your photos in RAW if you want the highest possible quality.





Shooting Factors

- **First set your camera to High Resolution and Low Compression.**
- **Other major considerations are:**
 - **Focus**
 - **Zoom**
 - **Subject**
 - **Lighting**
 - **Composition**





Camera Focus

- Don't miss the shot! The safest setting is the “Automatic” setting.
- Hold the camera as still as possible when depressing the shutter button.
- As long as your subject is in focus, most other elements effecting image quality can be adjusted later by the editor.





Primary Subject

1. Where do you want the audience to look?
2. Make sure that everyone in the photograph is in proper uniform.
3. Make sure life jackets are properly worn when on board a vessel!



NOTE: The photographer knows these members are just boarding, but that may not be clear to others.



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Lighting

- Use a flash indoors or in deep shade.
- Avoid bright lights (and windows) behind the subject as it creates a silhouette effect.





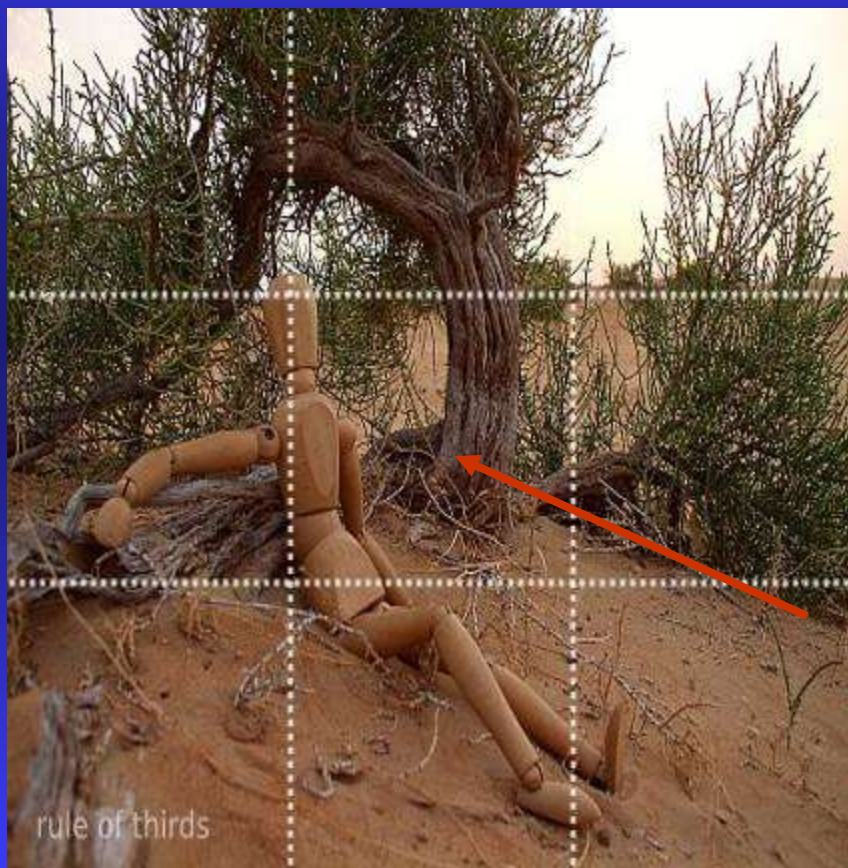
Composition

- When taking shots, centering the subject in the photograph can create a less interesting or telling photograph.





More Composition



- **Avoid Bulls-eye effect by applying the Rule of Thirds.**
- **Allow background objects (except the horizon line) to create visual angles.**

Photo source: <http://samirbharadwaj.com/blog/top-5-tricks-for-taking-professional-looking-photos-with-your-digital-camera/> Used with permission.





Photo Storage

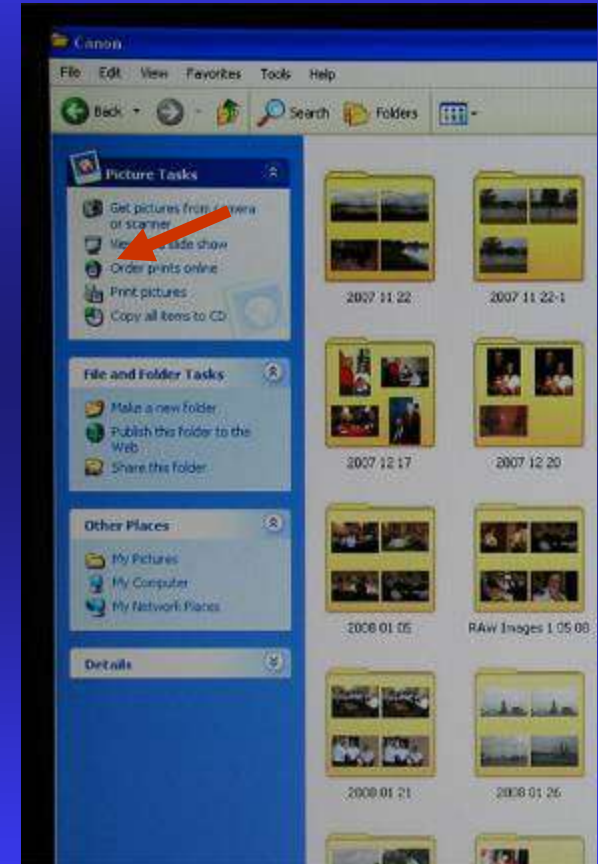
- **Most cameras store images on removable Compact Flash photo cards.**
- **Erase bad shots as you shoot to make more room for good shots.**
- **Don't erase your "keepers" until you are sure they are properly saved onto your PC or Mac.**





Download to PC/Mac

- Most digital cameras come with photo software for your PC.
- With Windows XP® or Vista®, no software is necessary. (Great, when you find a cheap digital camera at a yard sale without a manual!)
- Remember where you saved your photographs on your machine!





USCG VIRIN Protocol

VIRIN is a photograph file naming protocol used by the USCG and based on a similar system used by professional photographers.

100912-G-1234A-504.jpg

YYMMDD - CG - Last 4 SS# - 5=Digital
& Last Initial 04=Shot #





More VIRIN Protocol

- A VIRIN is a numerical filename system where the first six numbers are the year, month and day. For example, June 22, 2005 is 050622.
- These numbers are followed by a dash “-” and then the service indicator letter “G”. 050622-G
- Next are the last four numbers of the photographer's member identification number and the first letter of the photographer's last name. 050622-G-1234A
- This is followed by a dash and then the photographer's daily sequence number. The daily sequence number pertains to the number of photos the photographer took that day. The numbers “500-999” indicates digital, so start your numbering at “500.”
- For instance, the fourth photo would be “004”. Make sure .jpg is on the end of the filename. 050622-G-1234A-504.jpg





Why Use VIRIN?

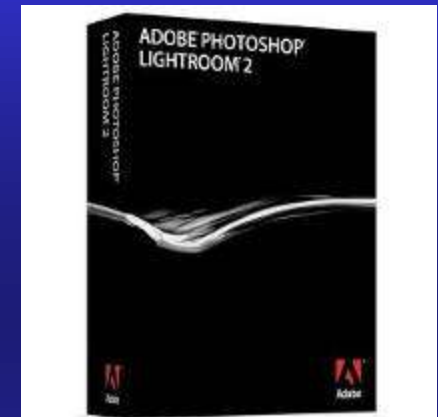
- 1. It provides a uniform system throughout the Coast Guard to track photo inventory.**
- 2. The National AUX PA Department requires VIRIN use for all photographs submitted to NAVIGATOR and other publications.**
- 3. Using VIRIN will allow your photographs to be archived in the CG National Imagery Database.**





Photo Editing

- Adobe Photoshop Elements 7
- Adobe Photoshop Lightroom 2
- Adobe Photoshop CS4
- Aperture 2 (by Mac)
- Picasa (Google)
- Others (Microsoft, Camera Mfgs.)



NOTE: Avoid editing any photograph submitted for publication. AP Guidelines specify only lighting and cropping is permitted.





Editing Guidelines

- Do not edit photographs unless you are an experienced user of a high-end photo editing program like Adobe Photoshop or Lightroom.
- Do not crop your photographs as this reduces the file size and the pixels available to create high resolution prints.
- Trust the publication editors to make a less than perfect picture look great!





Let There Be Light!



This photograph lacks proper lighting and interesting composition. However the **Lighting** can be corrected within editing programs as long as the subject is in proper **Focus!**



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Dynamic Cropping



This photograph illustrates how an ordinary photograph can be made more visually appealing by **cropping** to create a more interesting **composition**.

Photo by Guy Mandigo, VFC 75, D7



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Captions and Credits

- Each photo requires a caption identifying where the photo was shot, who is in the photo, and what/when/why they are doing. Cite units and offices. More information is better than less.
- Each photo requires a credit citing the photographer or copyright owner of the photo.
- REMEMBER: Copyrighted images require express consent for publication. Never use photographs of minors without the parent's written consent on a Photographic Release Form.





Proper Caption/Credit

MIAMI, Fla.: Judy Sanchez, VFC 6-11 D7 practices for her Coxswain certification at the helm of OPFAC *Bravo Zulu* on the waters of Biscayne Bay on August 7, 2009.



Photo by Christopher Todd, ADSO-PA-E D7, USCGAUX



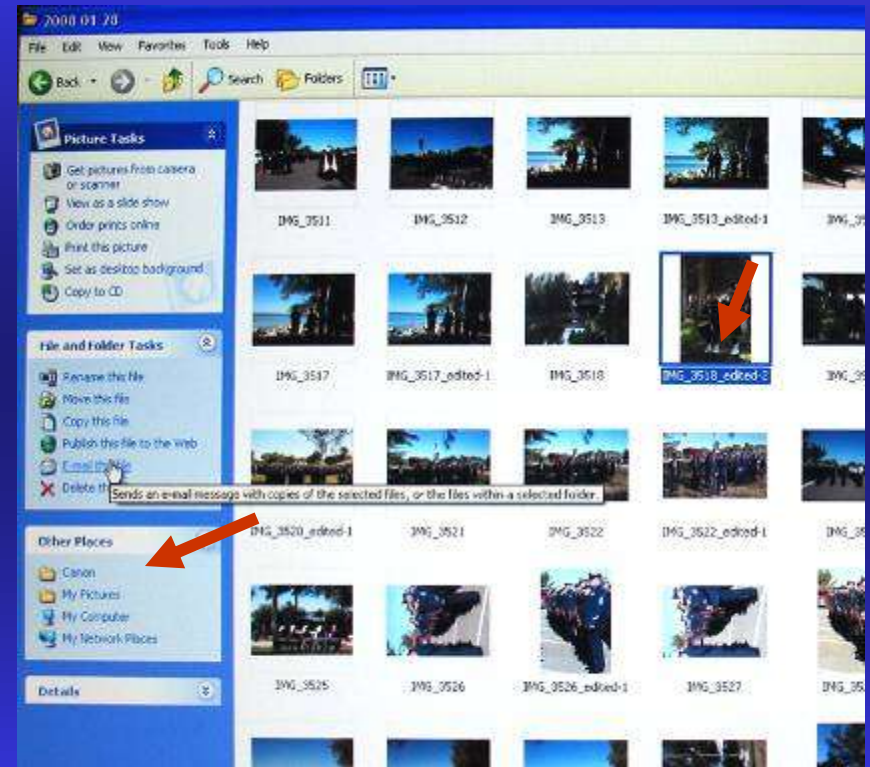
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E-mailing Hi-Res Photos

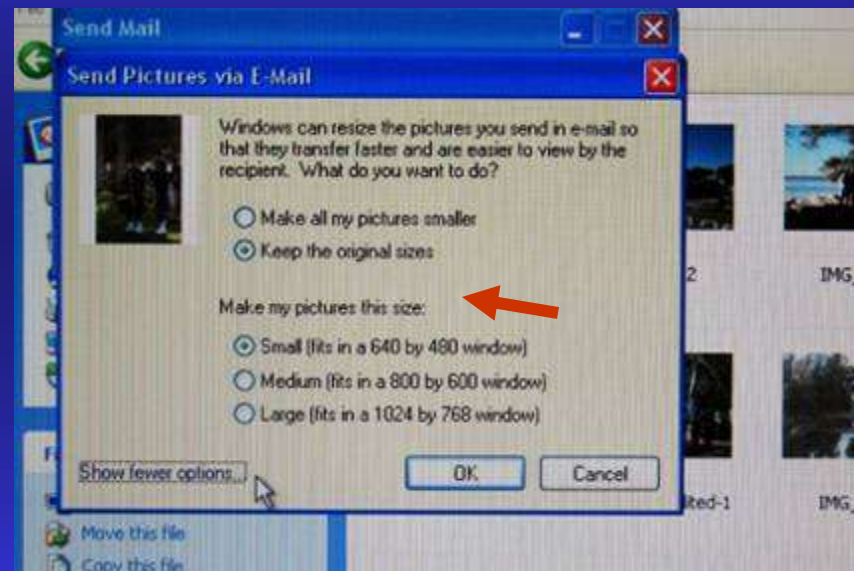
- High resolution photos can be e-mailed from within Windows® and most other photo programs.
- Click on the file you want to send, then click “Email this file”





Windows® Dialogue

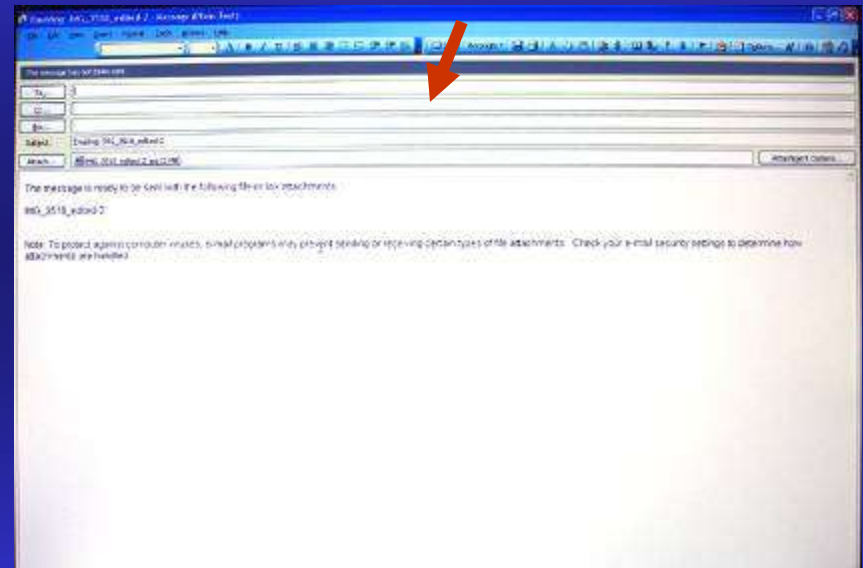
- When you click on “Email this file” a second dialogue box will open.
- Be sure to check “Keep the original sizes”. This will open a new message within the E-mail program.





More Dialogue

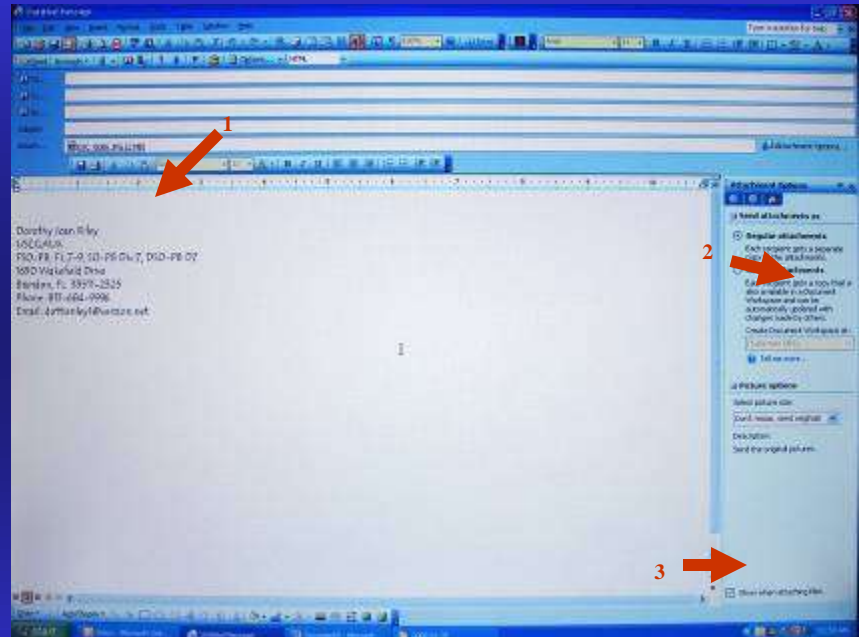
- Fill in the address line, subject line and any message you wish to include (Captions/Credit).
- Hit “Send”. You are done!





Send via E-mail Program

1. Create a new email.
2. Click the paperclip to attach a file (or click Insert/File).
3. If the Attachment Options box does not open automatically, click to open.
4. Make sure the dialogue reads: “Don’t resize, send originals”.
5. Fill in address, message, etc., as in sending images from Windows®.



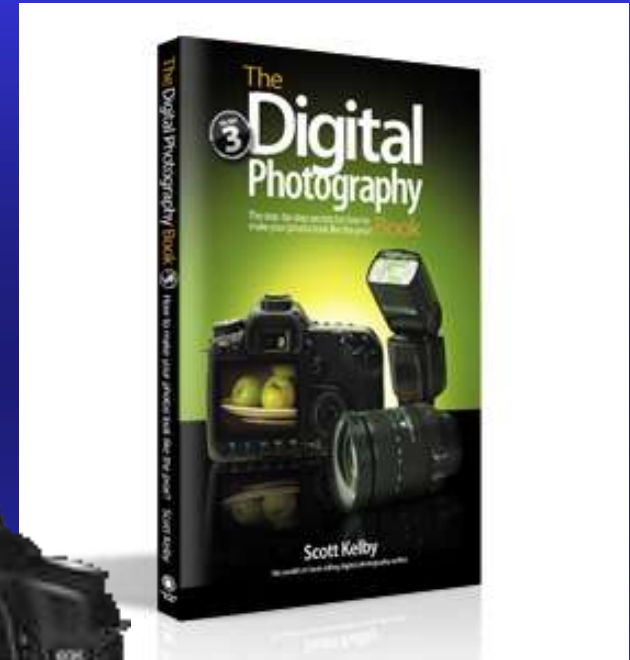
NOTE: This is Microsoft Outlook. Similar features are found within most email programs.





Advanced Photography

- Invest in quality photo equipment.
- The Digital Photography Book Volumes 1, 2, & 3 by Scott Kelby.
- Practice and Experiment.
- Have Fun!





D7 Photo of the Month

- **Starting October 2009**
- **E-mail your Photo/Caption/Credit to your SO-PA or SO-PB by the 1st of each month.**
- **ADSO's forward to DSO's for selection.**
- **The winning photo will be prominently displayed on cgaux7.org each month!**
- **Photo of the Month winning photos will receive a special certificate!**





Final Review

1. Shoot in High Resolution and Low Compression.
2. Make sure your subject is in focus.
3. Avoid cropping and editing your images unless you are trained.
4. Use the VIRIN file naming system.
5. Provide a proper caption and credit for each photo.





Semper Paratus

1. Always be ready to take a photo - your next great shot is just around the corner!
2. Always be ready to jot down notes on who was in the photo along with their correct name title, and unit number.



Photo by Christopher Todd,
ADSO-PA-E, D7 USCGAUX





Thank You

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