

PRE-MISSION INVENTORY

1. This checklist
2. NIKON D100 Camera with battery & memory card inserted.
3. Items per the inventory in the equipment case which include but may not be limited to:
 - a. Camera
 - b. Camera Manual
 - c. Camera to Computer USB cord
 - d. Computer
 - e. Computer to Sat Phone RS-232 cord
 - f. Camera Battery Charger
 - g. Computer Battery Charger

PRE-MISSION PREPARATION

1. Clarify Customer Needs.
2. Check battery strength and charge batteries (computer and camera) as needed.
3. Setup Computer for Mission
 - a. Insure Mission IC opens an SDIS Mission in WMIRS and provides you Mission Number from WMIRS
 - b. Connect Computer to LAN (or Phone Line)
 - c. Double Tap **Configure System for LAN** (or **Configure System for Earthlink or Satellite**)
 - d. Verify Screen Status shows Configured for LAN Connection (or Earthlink Dialup Connection)
 - e. If phone line used
 - 1) Double Tap on **Earthlink Phone Numbers** and note appropriate local phone number (Close window)
 - 2) Double Tap on **Earthlink**, enter phone number, Tap on Dial
 - f. Verify connection to Internet via LAN (or Earthlink)
 - g. Double Tap **SDIS Status** (SDIS Icon should appear in System Tray)
 - h. Tap on OK
 - i. Right Tap on SDIS Icon in System Tray
 - j. Tap on Show (SDIS Status Monitor window opens)
 - k. Tap on Refresh WMIRS (downloads list of open missions to program)
 - l. Tap on Setup Mission
 - m. Select your Mission Number from list

- n. Tap on Set Mission an "OK"
4. Enter proper e-mail addresses in the Outlook Express Address Book (including Customer(s), CAP Mission Base⁺, yourself if desired) [Note: WMIRS is automatically and invisibly addressed by SDIS Computer system]
 - a. Double Tap **Outlook Express** ICON on desktop
 - b. Single Tap ADDRESSES Icon
 - c. Tap New... New Contact
 - d. Type the First (Middle) Last Names
 - e. Type and verify e-mail address
 - f. Tap ADD
 - g. Tap OK [Repeat as needed]
5. Create/modify Group Address as needed for ease of entering all Mission addressees with one entry later
 - a. Double Tap **Outlook Express** ICON on desktop
 - b. Single Tap ADDRESSES Icon
 - c. Tap New... New Group
 - d. Type Group Name
 - e. Tap Select Members
 - f. Tap Name(s) and tap Select →
 - g. Tap OK / Tap OK
6. Shut Down Computer completely (not standby)
7. Check (return) Camera to CAP Mission Defaults
 - a. Power on
 - b. Erase previous images (Playback – Delete – All, p124/125).
 - c. Image Quality – Fine (Shooting – Image Quality – JPEG Fine, p135/136).
 - d. Resolution – Large (Shooting – Resolution – Large)
 - e. White Balance – Auto (Shooting – White Balance – Auto)
 - f. Function dial to P (auto multi program, p29)
 - g. Shooting mode switch on S (single frame, p29)
 - h. Focus mode to S (Single server auto focus, p29)
 - i. Focus metering method to matrix (middle position, p29)
 - j. Lens focus set to Normal
 - k. Power off
8. Document communications requirements
9. Plan the sortie
10. Take camera, computer, In-Flight Mission Bag to plane

PRE-LAUNCH AIRCRAFT SET-UP and OPS CHECK

1. Connect Computer to Sat Phone (right rear seat connector) with RS-232 cable
2. Attach USB cable to Computer but do not connect to camera
3. Ensure all personal gear and baggage will not interfere with cables
4. Verify message buffer is empty (Use Delete Mail Buffer tool if not).
5. Perform an end-to-end test with all SDIS equipment when A/C is powered up
 - a. Take a picture
 - b. Download Picture (temporarily attaching USB cable to camera only long enough to complete the transfer)
 - c. Crop Picture
 - d. Send Picture to e-mail (opens e-mail message)
 - e. Send e-mail to Mission Base
 - f. Verify e-mail with picture received at Mission Base

AERIAL PICTURE TAKING

1. Camera Strap – around shoulder harness
2. Lens cap – Removed
3. Power Switch – ON
4. Verify
 - a. Function Dial (upper left dial) = P (auto multi-Program)
 - b. LCD Control Panel (upper right display) shows “L” (large image)
 - c. LCD Control Panel shows “FINE” (high resolution JPEG)
 - d. LCD Control Panel shows “A” (auto white balance)
5. Take pictures as required. (Can take up to 6 images in rapid sequence)

QUICK REVIEW USING CAMERA (IF DESIRED)

1. Press Monitor button (upper left of monitor)
2. Scroll through pictures using Multi-Selector (upper right of monitor) up-down
3. Press Monitor button again to extinguish monitor

DOWNLOAD PICTURES TO PC

1. Turn Camera off
2. Turn Computer on and let it complete its booting sequence.
3. Attach USB cable to camera (behind flap left side of camera)
4. Turn Camera on
5. PC will recognize Camera within 10 seconds and automatically start **Nikon Transfer**
6. Tap on orange squiggle double arrow button (downloads all images to a new folder in My Pictures; opens **Nikon Browser** in this new folder)
7. Turn Camera Off
8. Disconnect USB Cord from camera

PREPARE PICTURES FOR TRANSMISSION

1. Ensure **Nikon Browser** program is running
2. Select photo to crop by tapping once with stylus—Picture turns dark
3. Select icon of square with a pencil pointing into it (opens **Nikon Editor**)
4. Ensure Crop Button on the left tool bar is active (dotted square)
5. Using stylus (or finger), drag and select the area of photo to crop
6. If the wrong area is selected, simply tap on the picture outside the selected area
7. Save the cropped image using the FILE and SAVE AS menus
8. CHANGE (if necessary) the “Save as Type” to JPEG Format
9. Select a new name for the cropped photo and save (pay attention to where you save this cropped picture!)
10. Exit **Nikon Editor** (Tap on red “X” in upper right corner, or select or File - Exit); returns you to **Nikon Browser**
11. Repeat for all photos needing to send

PREPARING E-MAIL FOR TRANSMISSION

1. Double Tap (if necessary) **Nikon Browser**
2. Navigate to appropriate folder where cropped images were saved and select image(s) to send by using CTRL tap with stylus (or finger)
Note: typical e-mail should be 1 – 5 pictures
3. Select the ENVELOPE from the tool bar
4. Ensure the REDUCE size to small box is selected
5. Set size to 640x480
6. Set Quality to Good (one notch below highest quality).
7. Select SEND
8. Type in e-mail address – USE GROUP or INDIVIDUAL ENTRIES IN THE ADDRESS BOOK if at all possible
9. Enter a Subject line
10. Enter a SHORT text message if needed
11. Recheck addresses and text
12. Press SEND

Note: SEND WILL COPY MESSAGE TO OUTPUT SPOOLER. WITHIN 10 SECONDS, THE SATELLITE ANTENNA ICON IN THE SYSTEM TRAY TURNS FROM GREEN TO RED MEANING A MESSAGE IS READY TO SEND. IF THE ARNAV IS CONNECTED AND POWERED UP, THE COMPUTER WILL AUTO DIAL NAT TECH CENTER AND CONNECT TO INTERNET. NETWORK ICON IN SYSTEM TRAY WILL DISPLAY MESSAGE “CONNECTED TO INTERNET” AND INDICATE MESSAGE TRAFFIC WITH FLASHING NETWORK ICON. IF CONNECTION FAILED, SDIS WILL PERIODICALLY CHECK FOR A CONNECTION AND SEND WHEN ARNAV BECOMES AVAILABLE. WITH A GOOD CONNECTION TRANSMISSION OF A SINGLE IMAGE WILL TAKE 2-3 MINUTES.

DO NOT SEND MORE THAN ONE IMAGE AT A TIME!!!

CLEARING THE MAIL BUFFER WITHOUT SENDING

(Use this for training to ensure test messages are NOT sent)

1. Double tap on the “Delete Mail Buffer” icon on desktop
2. Satellite symbol on lower right tool bar should go GREEN (nothing to send)

POST MISSION ACTIVITIES

1. Charge all PC and camera batteries as necessary
2. Inspect equipment
3. Copy photos from camera memory card to PC for later editing and uploading to WMIRS as desired
4. Erase pictures from camera.
5. Inventory Equipment
 - a. This checklist
 - b. NIKON D100 Camera with battery & memory card inserted
 - c. SDIS Panasonic Toughbook Computer
 - d. In-Flight Mission bag containing
 - 1) Spare camera battery
 - 2) Camera Manual
 - 3) Camera to Computer USB cord
 - 4) Computer to Sat Phone RS-232 cord
 - 5) Stylus (for touch screen)
 - 6) Computer screen cloth
 - e. Camera Battery Charger
 - f. Computer Battery Charger
6. Package and Secure Equipment