Gear to Bring
- **2 extra baskets - at least 4 total baskets**
- Logs: IAL, Inc Take, Discard, Fisherman’s Comment, Twin Trawl
- References: Conveyor & Volume Cheatsheets; Peterson guides; Mammal/Turtle, Sea bird, Sharks/Pelagics Books
- Other: Camera, calipers, 100 & 12lb scales, long measuring tape, depth stick, INC Take sampling kits

iPAQ
- SECTORASM
  - Small mesh trips landing > 2500lbs of Atl Longfin Squid
  - Upload in 48hrs
  - Requires CEW photos
- OBSCON
  - Small mesh trips (whiting, shrimp, etc) landing ≤ 2500lbs Atl Longfin Squid
  - All Twin Trawl trips (overnight paper logs)
  - Upload in 24hrs
- If uploaded using incorrect program, Observer will be responsible for re-upload
- Upload
  - Program Code = 000, Fleet ID Code = 000
  - If vessel not in dropdown list, select “NEWVES#” & comment on Name, Hull #, Permit #
  - Select EMS_USED if applicable

V&T Log
- Program Code = 000, **Fleet ID Code = 000**
- Comment if using Marel scale during trip

Gear Log
- Squid
  - Eliminator Trawl- Like Ruhle Trawl but w/ liner
  - 12” Dropchains- Can be any Net Type, comment dropchains = 12”
    - Escape Outlet opening, length of footrope, height 12”, shape 01, location 99
- Whiting
  - Raised Footrope Trawl- Comment on dropchain length and space between chains
  - Excluder device Type 05
- Take your time when collecting codend & liner measurements

Before 1st Haul
- Communicate with captain & crew about observer duties
  - Inc Take/IAL protocols, measuring codend & liner
  - Obtaining depth measurements of the pile before it’s flooded
  - Setting aside any larger discarded species
- Measure Checker Pen
  - Complete diagram and measurements of all parts and height of boards
  - Account for unusual shapes at start of the conveyor
- ID if EMS Vessel
  - Will not be able to sample from end of conveyor because of cameras
- Identify the best work area and if it’s possible to work off end of conveyor

Sub-Sampling
- **ALWAYS** get a total volume of the pile
• Kept and Discarded weights are used real-time, so the more accurate you can be, the better
• Ideal situation: all kept catch runs off conveyor directly into hold and/or containers and crew picks discards off conveyor for observer to get actual weights when complete
• Alternative strategies for situations where discarded catch runs directly off conveyor:
  o Strategy 1: Collect discard volume in totes at end of conveyor
    Subsample from end of conveyor
  o Strategy 2: Total volume in pen – Total kept volume = Discard volume
    Subsample discards only from end of conveyor
  o Strategy 3: Total volume in pen
    Subsample from pen, don’t separate by disposition code (unless min size)
    Subtract kept weight from total weights
• Use Catch Composition Log when accurate volume cannot be obtained (ie. splitting the codend)

Catch Estimation Worksheet
• 1st haul must have detailed diagram of checker pen and all measurements
  o Draw a new diagram if the original pen is altered in any way
• 10 depths every haul
• Strategy number written in top left corner of comment section, under tally/basket count box
• List all species that appear in subsample, even for ones where volume-to-volume is not used
• Disposition codes written with subsample species
• Volume calculations of ‘other’ containers used

Incidental Takes/IALs
• High likelihood of seeing any and all types (especially dolphins, sharks, swordfish & rays)

Sampling Priorities
• Lengths of both kept and discarded Atl Longfin Squid and Butterfish

Discard Log
• Use when the haul is unobserved due to large bycatch release (ex: releasing bag full of butterfish)
• Offer Fisherman’s Comment Log after discard event

Species Verification
• 30 species every quarter, the first time encountered (photos or whole)
• Any new/unusual species that you question the ID

Overall Priorities
1. Accurate weights of both kept and discarded Atl Longfin Squid and Butterfish
2. Lengths of both kept and discarded Atl Longfin Squid and Butterfish
3. Accurate weights & lengths of river herring species

Other
• Photos of gear, conveyor system, subsampling (for training)