APPENDIX 16. PowerPoint Presentation given by Russ Brown

**Experiment Cruise to Examine Gear Performance with Offset Warps**
- September 24-27, 2002
- Video & measurement work completed on September 25-26
- Six Industry Participants
  - Rod Fernandes
  - Stephen Lee
  - James Lengren
  - Sam Novick
  - James O'Call
  - Matthew Samuel

**Trawl Warp Experiment**
- Two Primary Objectives
  - Provide initial qualitative observations of the effects of offset warps on net geometry and fishing gear performance
  - Provide a quantitative evaluation of the effects of offset warps on net wingspread, door spread and head rope height

**Experimental Approach**
- Intentional Manipulation of Trawl Warp Lengths
  - Even Warps
  - Starboard and port offsets of 8, 12, 16, 20, 24, 28 feet
- Qualitative Evaluation of Trawl Performance through Video Observation
  - Net shape and geometry
  - Roller and fuse gear tracking
  - Fish behavior
- Quantitative Evaluate of Trawl Geometry through Net Sensor Measurements
  - Wing Spread
  - Door Spread
  - Headspace Height

![Diagram of Video Camera, Headspace Sensor, Wing Spread Sensor, and Door Spread Sensors]
APPENDIX 16 (CONTINUED).

Video Images Collected

- Roller Sweep
- Starboard Corner and Wing
- Port Corner and Wing
- Transitional Clips (during changes in warp length)

Results Presentations

- Net Mensuration Data (Lisa Hendrickson)
- Video Images (Henry Milliken)
  - Sampling of video images from each tow
    - Transition from previous to new warp length (when available)
    - Roller sweep
    - Port and starboard wings