

**Ultrasound Guidelines Council**  
**Field Technician Study Guide**  
2012 Edition

**Chapter I – History of Technician Certification, Centralized Ultrasound  
Processing and UGC**

*J.R. Tait*

**Purpose** = to briefly outline the milestones of technician certification and centralized ultrasound processing in the U.S. beef industry, including the history of UGC.

**Technician Certification**

- January 1989. The first certification test of ultrasound technicians was held at Texas A&M University, using standards developed by the Beef Improvement Federation (BIF).
  - Technicians collected rib images for the measurement of ribeye area and rib fat depth.
- Early 1990's. BIF administered several beef cattle ultrasound certifications through host institutions.
- 1996. BIF administered the first certification for intramuscular fat.
  - About this time BIF decided that it was not the appropriate organization to oversee certification of technicians.
- 1998 – 2000. Iowa State University (ISU) and the American Angus Association (AAA) conducted a research project on the logistics of technician certification and centralized ultrasound image processing.
  - Technician certification required proficiency in all traits.
- 1998 – 2000. Animal Ultrasound Practitioners (AUP), a self-governing organization of technicians, began certifying technicians.
  - Technicians interpreted their own images.
  - Technicians were certified for specific traits.
- 2001 – 2002. ISU hosted the certifications under the auspices of Annual Proficiency Testing and Certification (APTC) Committee.

**Centralized Ultrasound Processing**

- 1998 – 2000. Iowa State University (ISU) and the American Angus Association (AAA) conducted a research project on the logistics of technician certification and centralized ultrasound image processing.
  - Multiple breed associations were allowed to accumulate data throughout this project.
  - During this time lab technicians tended to be specialized, focusing on the interpretation/measurement of specific traits.
- 2001. The ISU centralized ultrasound processing (CUP) lab was transitioned to the private firm of Walter and Associates, LLC.

**The Ultrasound Guidelines Council**

- 2001. Annual Proficiency Testing and Certification (APTC) Committee was established by the US Beef Breeds Council (USBBC).
- 2003. APTC changed its name to the Ultrasound Guidelines Council (UGC).

## **UGC Organization**

- Purpose
  - “To develop and maintain a governance structure and protocol for proficiency testing and certification for technicians involved in ultrasound scanning of beef cattle for composition traits and in interpreting images used in genetic evaluation programs.”
    - A copy of the UGC Operating Protocol is associated with this chapter.
- Composition
  - Four beef breed organization representatives appointed by the USBBC
  - Three university persons involved directly in ultrasound research and national cattle evaluation programs using ultrasound data
  - One active field ultrasound technician
  - Up to three representatives from centralized labs

Last Update – July 23, 2012