**GRID CUTOFF**

**Laboratory Experiment #8**

**Procedure:**

Without any phantom, expose films with grids as listed below, using 60 kVp and 40-inch SID, and a 16:1 focused wafer grid with a 36-42 inch radius. Be sure to abel your films with lead markers.

Alternate Grid ratio = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Alternate Technique = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Film #1:** Angle beam 15 degrees parallel to (along) grid strips and center. Use 25 mAs.

**Film #2:** Angle beam 15 degrees across grid strips and center. Use 25 mAs.

**Film #3:** Off-center a perpendicular beam across grid strips by 4 inches (mask off unused portion of field). Use 15 mAs.

**Film #4:** Perpendicular, centered beam, but change SID to 20 inches (cut mAs to 10 mAs).

**Film #5:** Turn grid upside down with perpendicular, centered beam. Use 10 mAs.

**Film #6:** Change to a 6:1 grid, if available, and angle the beam 15 degrees across the grid strips, as in #2, and center. Use 25 mAs.

**Film #7:** Repeat #6, only with a *PARALLEL* 6:1 RATIO GRID. Use 25 mAs.

**Analysis:**

NOTE: Be sure to observe each film toward the outer edges where grid lines will show the best.

1. List which of the situations above caused grid cutoff only toward one side of the film.
2. Which of the situations above caused grid cutoff equally toward both sides of the film?
3. Compare Films #2 and #6. Does using a different grid ratio affect the severity of grid cutoff caused by angling? If so, which grids are most selective and need more care to be take to center and align the CR perfectly.
4. Note Film #1. Does angling *parallel* to grid strips visibly increase grid cutoff?
5. Can you off-center a grid in a direction parallel to the grid strips?
6. Compare the densities between the off-angled films for the focused 6:1 grid (Film #6) and the *parallel* 6:1 grid (Film #7). Is there a difference; why?