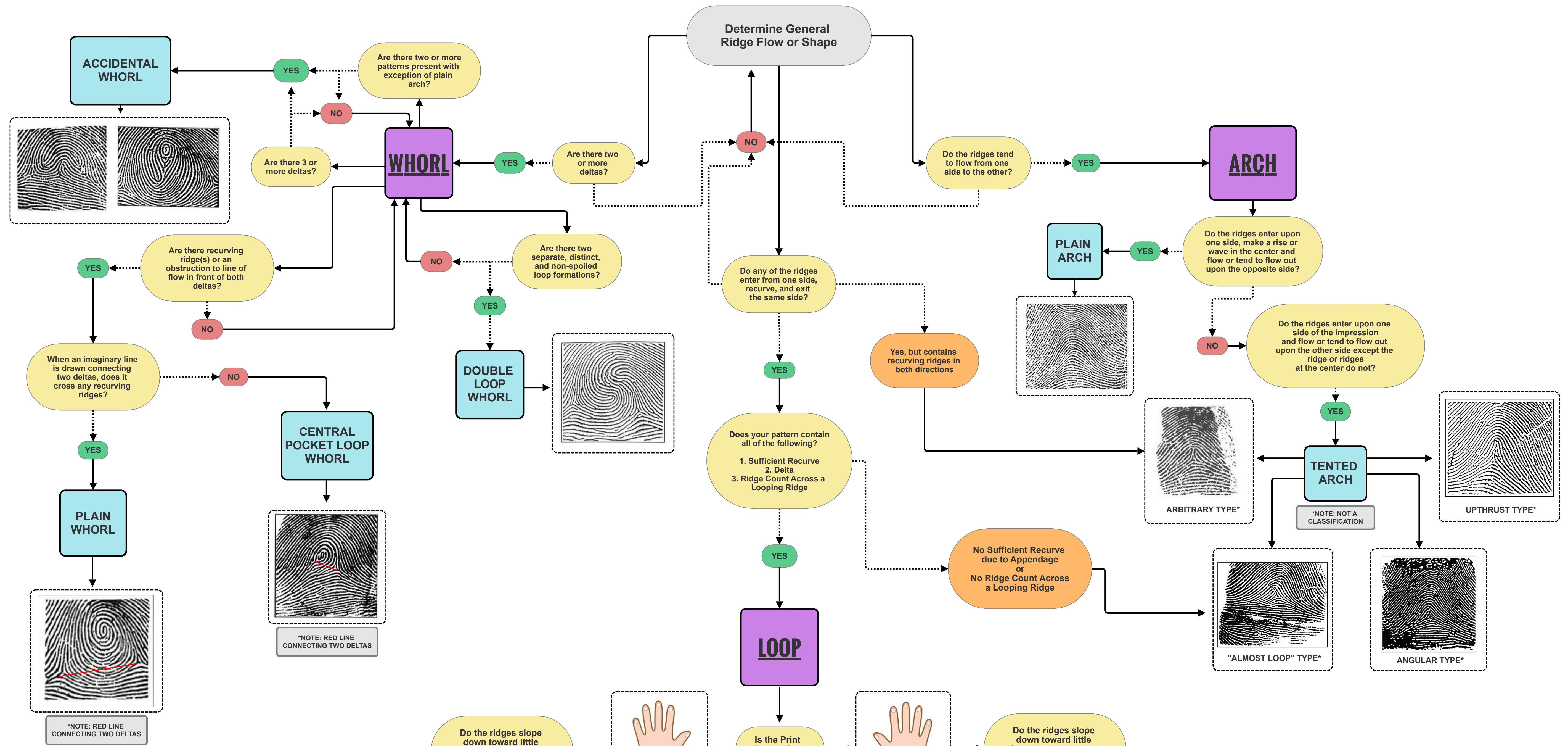


FINGERPRINT PATTERN INTERPRETATION FLOWCHART



DETERMINING WHORL TRACING:

- Locate the farthest left and farthest right deltas
- Starting at the farthest left delta, trace the ridge to a point opposite the right delta.
- When a ridge being traced ends, drop down - away from the center of the pattern.
- If a ridge bifurcates, follow the lower fork of a bifurcation that is further from the center of the pattern.
- Stop at a point opposite the right delta
- Count the ridges between the tracing ridge and the delta. Do not count the tracing ridge or delta.
- It is not necessary to count more than 3 ridges.

• **Inner Tracing** - if there are 3 or more ridges inside the right delta (between the core and delta)

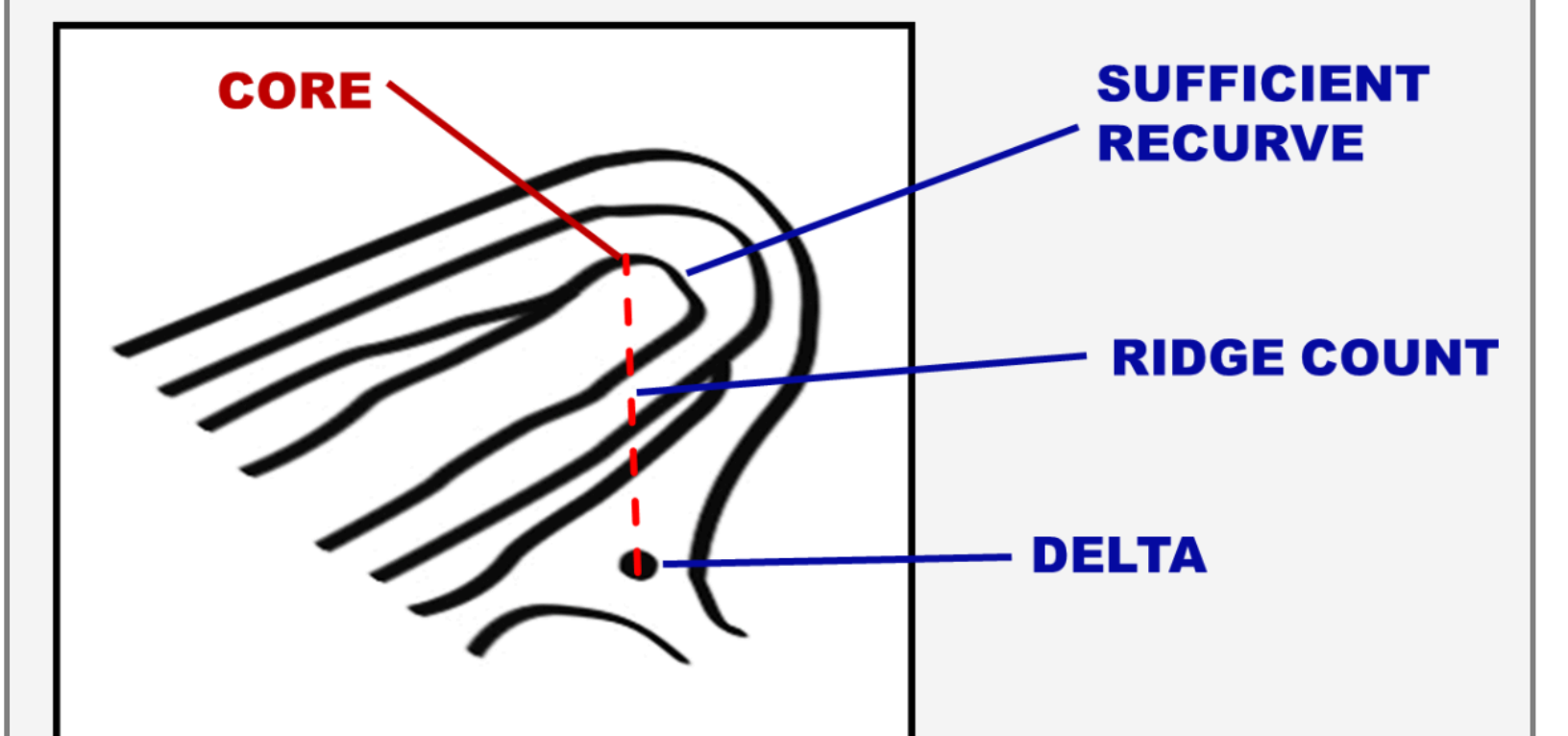
• **Outer Tracing** - if there are 3 or more ridges outside the right delta

• **Meeting Tracing** - if there is less than 3 ridges inside or outside of the right delta or if tracing ridge touches the delta.



DETERMINING RIDGE COUNT OF A LOOP:

- Locate the core of the loop. **Core** is the approximate center of the pattern placed upon or within the centermost sufficient recurve.
- Locate the delta of the loop. **Delta** is point on a ridge at or in front of and nearest the center of the divergence of the typlines. **Typelines** are the two innermost ridges that start or go parallel, diverge or tend to surround the pattern area.
- Draw an imaginary line between the core and the delta.
- Count each ridge that is crossed by the imaginary line. DO NOT COUNT DELTA OR CORE.



Created by Dr. Brian Turner, CSCSA & CTPE in Association with the IAI Tenprint Science & Practices Subcommittee.

References:

1. Federal Bureau of Investigation. (2006). The science of fingerprints: classification and uses.
2. FBI Criminal Justice Information Services Division Identification Services Section. (1993). Fingerprint Training Manual. Washington, D.C.: U.S. Department of Justice.