"Short ridges are shorter than the adjacent surrounding ridges, but at least twice as long as a dot."

This is but one of several explanations you may receive when posing the question, "Just what is a short ridge?"

"It's not just a raised portion of skin, it has length, as well as width." "It's at least twice as long as it is wide." "I can't define a short ridge, but I know 'em when I see 'em." "A short ridge is a ridge of limited distance." "Short ridges terminate on both ends in a very short distance." "It's longer than it is wide." Take your choice or coin your own definition and it will no doubt fit the occasion.

Discussions, as well as the written word, have been put forth debating the value of the short ridge as an identifying characteristic. Do you subscribe to the theory that a short ridge comprises one point of identity or two? Do you chart an exhibit using and illustrating short ridges as one characteristic? In the #1 photograph the terminal ends of a short ridge are designated as "A" and "B" and you are counting the intervening ridges to point "C." Will the "A-C" count be the same as the "B-C" count? If the ridge count is the same, will you consider the short ridge as one characteristic or two? In this instance the ridge count from A to C is 9 and the count from B to C is 12 or 13. Would you then say that the relationship between "A-C" is different than "B-C"? Does a 2 or 3 ridge difference between points classify as a dissimilarity? Would you have a non-identification if such a dissimilarity exists between two points in a comparison? If identification depends upon the number of intervening ridges between two characteristics being the same then should short ridges be treated as one characteristic or two?

At least one book in the search of the literature on the subject advocates not only classifying "short ridges" as one characteristic, but would include "enclosures" as well!

"Photograph #1 on next page"
GUNSHOT RESIDUE (Kilty)


Neutron Activation Analysis (NAA) is used by the FBI Laboratory to detect elevated levels of barium and antimony on the hands to indicate recent handling or discharge of a firearm. The procedure for processing sample swabs in the laboratory has been extensively automated and computerized manipulation of the analytical data is used to permit a large number of samples to be handled cost effectively. Following a brief history of gunshot residue analysis, the principles of NAA and the approach used to examine samples is described. Factors involved in the interpretation of the data and conclusions which can be reached provide information equally valuable to the investigator or attorney.

Submitted by Dick Taylor

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