## Ft. Stewart Historic Aerial Photo Orthorectification and Mosaic Process

Historic aerial photos acquired 19 January 1947 were used to develop a georeferenced, orthophoto mosaic. Shown below are images used in the orthorectification process for the western portion of the post. Image A&B were used as horizontal ground control point references and a DEM (image C) was used as a vertical reference to develop the orthophoto mosaic (image D). Image E is a seamless, color-balanced product. Image F is a landcover map produced from image E using an unspervised image classification algorithm. One of the benefits of developing an orthophoto mosaic from historical photos is to validate pre-existing, environmental conditions using the "Grandfather Clause". An orthophoto is an excellent image-base which is used to develop GIS layers back through time. Historic orthophotos can aid in:Tracking Land Condition trends, documenting historic/cultural resources, identify training risk factors from the past (i.e. UXO in old impact areas), or help develop baselines for training area restoration/rehabilitation.

