To:    Mr. Stan Rose  
       Oakland Auditing

From:  David H. Levine 
       Tax Counsel  

Subject: X-------------------------------

This is in response to your memorandum dated February 3, 1989 regarding the application of sales tax to X------------------------, Landsat Images and Radar Imagery. Landsat is a remote sensing satellite which produces pictures of the earth's surface. The taxpayer states that when it purchases these pictures from the government or X--------- the images are run through a machine and unenhanced negatives, prints, or digital tapes are generated. You ask how tax applies to three types of transactions. Although it is not entirely clear from your memorandum and the materials you have supplied, it appears that taxpayer first purchases the products mentioned above from the government or X----------, and then contracts to have the work done on those products about which you inquire. Except when these products are purchased from the federal government, their use in California would be subject to use tax. (See Rev. & Tax. Code § 6402.)

You state that there are three types of work performed upon these products. Taxpayer has supplied a memorandum on this subject from one of its geologists. Taxpayer states that it contracts with vendors for their services and technical expertise to customize, photographically and digitally enhance, and mosaic basic Landsat products. Taxpayer states that each enhanced product requires individual work and that they are not pulled off the shelf for delivery to taxpayer. Although your memorandum indicates that this description is one of the three types of transactions, from taxpayer's memorandum it appears that this is but a summary of the two types of work performed on these products, Landsat mosaics and radar images. Thus, my analysis pertains to two types of work and not three. Taxpayer describes these as follows:

“LANDSAT MOSAICS

“Landsat mosaics are constructed by skilled technicians registering the individual scenes to a known map projection. They carefully overlap the scenes so that features seen on the earth's surface form a much larger, continuous image. They splice all of the scenes
together, combining them into one or more sheets. Mosaics show a much larger area of the earth and are a necessity for regional planning.

“We either order mosaics to be constructed, or we ask vendors to deliver specific areas/sizes/color combinations from their pre-existing mosaic negatives. All of the work is done to our specifications and the costs are considerable. Much photographic darkroom work is involved with Landsat mosaics after the mosaics are constructed. We are paying for technical services and expertise when ordering Landsat mosaics.

“In addition to mosaics, individual Landsat scenes can be ‘enhanced’ by outside vendors. This enhancement greatly increases the value to the basic product to X------------------. It involves utilization of digital computers, sophisticated color plotters, and extensive darkroom equipment.

“RADAR IMAGES

“Radar images are also improved when enhanced or mosaicked. X------------------ has proprietary radar data sets with X-------------. Two of these sets are wholly owned by X-- --------- does custom radar printing and mosaicking of individual flight strips. Their mosaics are of a higher precision than Landsat mosaics and they take a month to construct. For their services and enhancement of basic radar products (digitally plotted film positives), X------------------ receives the best possible customized product. It costs several thousands of dollars for their custom processing, dodging, printing, and mosaicking of radar films. These products are not available off-the shelf. We are paying for these services with Service Orders.”

DISCUSSION

Taxpayer asserts that these transactions are not subject to tax based on BTLG Annotation 420.0040 (9/26/72, 12/31/73). The conclusion in that annotation was that the gross receipts from the sale of aerial photographs are subject to tax with no deduction for flight costs, photographer’s time, material, etc. On the other hand, charges for an aerial survey would not be subject to tax when that survey is a professional undertaking employing precise engineering procedures and resulting in precise engineering reports or maps such as photomaps, planametric maps, topographic maps, magnetic maps, and gravimetric maps. Such surveys would be regarded as services with the provider being regarded as the consumer of any materials used or incidentally transferred.

With respect to mosaics, the annotation states:

“Mosaics (non controlled) are made by assembling vertical aerial photographs of approximately the same scale representing contiguous areas, matched at common points. The composite photograph of such assemblies is called a mosaic or noncontrolled mosaic. It is distinguished from a photomap in that the mosaic is not precisely engineered and is intended as a visual representation of the area rather than a presentation of exact engineering data. Gross receipts for furnishing mosaics are receipts from the sale of tangible personal property.”
This appears to be the same description as supplied by the taxpayer with respect to Landsat mosaics. We therefore conclude that the vendor is making a taxable sale of tangible personal property when performing this work. We reach the same conclusion even if the taxpayer supplies the maps which are spliced together. (Rev. & Tax. Code § 6006(b).)

We reached the same conclusion with respect to radar images as described by the taxpayer. Although this description indicates that certain technical expertise is required to fabricate these mosaics, that technical expertise does not appear to be professional engineering services. This appears to come within the taxable result of the annotation as quoted above.

In your memorandum, you indicate that despite taxpayer's statements, you believe that some of the work asserted to be custom work is not done pursuant to taxpayer's specific instruction but rather are more of a general product available for sale to anyone who wishes to purchase it. If our understanding of the facts is correct, then such sales to taxpayer would be subject to tax since even sales pursuant to a custom order would be subject to tax. If, however, some of the custom work does involve what we would regard as the providing of a service because of the professional engineering services involved, the last paragraph of the annotation would control. Thus, the vendor would be the consumer of the maps only if such reproductions are furnished pursuant to an original contract involving engineering services. If the party originally ordering the custom work ordered reproductions not as part of the original contract, or if sales are made to any other party (such as off the shelf), those sales would be subject to tax.

If you find other facts showing that there actually is substantial involvement of professional engineering services and would like us to review those facts, or if you have other questions, feel free to write again.

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