

BEFORE THE STATE BOARD OF EQUALIZATION
OF THE STATE OF CALIFORNIA

In the Matter of the Petition of TRW INC. for Redetermination of Sales Tax

Appearances:

For Petitioner: Mr. Norman A. Zilber
Attorney
Mr. James A. Amdur
Attorney

For Staff: Mr. Philip R. Dougherty
Tax Counsel

MEMORANDUM OPINION

This petition for redetermination by TRW Inc., was made pursuant to Section 6561 of the Revenue and Taxation Code from determinations of the Board that additional sales and use taxes were due from TRW Inc., for the periods January 1, 1964 through December 31, 1967 and January 1, 1968 through June 30, 1968. TRW Inc., is joined in the petition by Communications Satellite Corporation appearing as a real party in interest.

Petitioner is a corporation engaged in manifold activities, among them the sale of aerospace equipment and services. On May 7, 1966, petitioner contracted with Communications Satellite Corporation (hereinafter Comsat) to design and build two engineering model communication satellites (unit price \$5,042,364), one prototype model communication satellite (unit price \$5,716,794), six flight communication satellites (unit price \$585,577), and associated equipment, ground stations, test equipment, plans and specifications, and provide launch services, operating instructions, and progress systems engineering (unit prices were also specified for each of these items), all for a fixed total contract price of \$31,985,000.

The contract (CAS-SA-6) and the detailed work statement attached to it were written with the careful attention to itemization and detail familiar to government contractors. The contract specified the sequence of the performances and a unit price for each of the performances, provided for four interim payments relating to the two engineering model satellites and for progress payments at 90 percent of the contractors' incurred costs but limited to the unit prices for the models specified in the contract. The contract contained additional provisions relating to delivery, taxes, title, arbitration, etc. An itemized work statement further detailing TRW's duties was appended to the contract.

The satellites to be built by TRW were to have five times the capacity of the previous generation of communication satellites and were to employ a number of significant advances in technology. A substantial amount of research and development was necessary to produce a systems design which would meet the performance specifications required by Comsat. Under the contract, TRW was specifically required to successively fabricate and demonstrate a first and second engineering model satellite and

then one prototype model satellite to prove to Comsat that the design of the systems and performance of the produced hardware complied with Comsat's requirements.

After the Comsat contract was entered, TRW's engineering staff developed detailed design specifications for the satellites.

TRW then subcontracted the development and production of some subsystems of the satellites to various aerospace companies. The subcontracts and their work statements followed the structure of the prime contract. Each of the subcontracts called for the subcontractors to fabricate and sell to TRW, successively, engineering model satellite subsystems, prototype model satellite subsystems, and later flight model satellite subsystems along with the associated subsidiary equipment, test plans, and services relating to each subsystem. Each subcontract specified unit prices for each performance.

The bulk of the research and development effort for the project was antecedent to the completion of the engineering and prototype models. As in the prime contract, the largest portion of TRW's payments to its subcontractors were for the unit prices the subcontracts listed for the engineering and prototype model satellite subsystems.

When the subcontractors supplied a model's subsystem component, the petitioner's personnel assembled that model according to the developed specifications with the assistance of the subcontractors' personnel. The models were tested by the teams as part of the continuing process of the development of the satellite system. The assembled models were also used to develop the surrounding services and equipment, test data, test equipment, and information required of TRW by the prime contract. Additionally, each model was used to demonstrate to Comsat the progress of the project and the effectiveness of the system design and materials. Those demonstrations were specific performances required of TRW by the prime contract.

The prime contract also required TRW to pass title to the engineering and prototype satellites when the models were accepted by Comsat. The acceptances were informal. During the contract's performance, one engineering model was shipped to Comsat's receiving station at Andover, Maine. The prototype model was shipped to Comsat at Cape Kennedy. Comsat used the models it received to generate test signals and as exemplars of the engineering technology of that generation of its equipment. Apparently, one engineering model has never been accepted and remained in TRW's possession for some time after the contract was completed until TRW shipped it to a Comsat warehouse in Delaware.

The prime contract and its work statement and the following subcontracts and their work statements were amended several times during the course of the project to clarify engineering specifications, create work terminology, add launching services, and increase the number of flight spacecraft. The additional duties were related to additional specific prices. No change was made in the basic structure of the contracts.

The Board's determinations of the sales and use taxes due from TRW included use tax imposed on TRW's use of the engineering and prototype satellite subsystems in its performances under its prime contract with Comsat. The full sales prices stated in the subcontracts for the production and sale of each of the subsystems was used as the sales price upon which the use tax must be calculated.

Among the bases for redetermination urged by petitioner are that (1) the sole purpose of the prime and subcontracts was the production of flight satellites for a fixed total price, so the sale and use of the models are not separately cognizable and the prices paid to subcontractors for the models should be considered part of the price paid for flight spacecraft purchased solely for resale to Comsat; that (2) if the model subsystems are distinct from the flight subsystems for use tax purposes, TRW did not store, use, or otherwise consume the model subsystems within the meaning of the Sales and Use Tax Law, and no tax computed upon the purchase of the model subsystems is due; and that (3) if the subsystems were stored, used, or consumed by TRW within the meaning of the Sales and Use Tax Law, only the part of the price attributable to the cost of the models' hardware, as distinct from the cost of research and development, may be used as a sales price of the model subsystems for use tax purposes.

Before exploring petitioner's contentions in detail, we will set out some basic principles. Sales and use taxes apply to the sale and use of tangible personal property (Rev. & Tax. Code §§ 6051, 6201), and not to the mere performance of a service. In distinguishing between the sale of tangible personal property and the sale of a service, it is necessary to determine the true object of the transaction, i.e., is the real object sought by the buyer the "service" per se, or the finished article produced by the service? (*Albers v. State Board of Equalization*, 237 Cal.App.2d 494). Tax does not apply to a sale of tangible personal property for the purpose of resale in the regular course of business (Rev. & Tax. Code §§ 6051, 6007), nor to the use of property purchased for resale, unless the use goes beyond the mere retention, demonstration, or display of the property while holding it for sale in the regular course of business (Rev. & Tax. Code §§ 6094, 6244).

When examining contracts of the particular kind before us, it is necessary to distinguish contracts for research and development from contracts for the manufacture of a "custom-made" item. A contract for research and development is primarily a contract for information, which is regarded as an intangible. Such a contract is a service contract rather than one for the sale of tangible personal property even if the information is to be transferred on drawings, blueprints, memoranda, etc. If a research and development contract calls for the transfer of a prototype (previously used to develop the data called for in the service portion of the contract) the transfer of it is a sale of tangible personal property without any credit for the tax or tax reimbursement paid on its materials. But the measure of tax arising from the sale or the use of that prototype is not the whole contract price since the primary purpose of the whole contract was one for the service of developing information.

In a contract for the fabrication of a custom-made item, the research and development necessary for the fabrication of the item is incidental to the primary purpose

of the contract, which is the production of the item rather than the information it embodies. The price of the item which must measure the tax may not be reduced by the cost of the research and development necessary to produce it.

To determine if a contract was for the sale of services or the sale of tangible personal property, the language of the contracts must be read in the light of the surrounding circumstances and the parties' purposes and actions.

In this case the prime contract appears to be one in which the purpose was the development and sale of custom-made items, the flight spacecraft and their attendant equipment and services, which were to be used in Comsat's business operations. Under the prime contract, the models were incidental to the research and development phase of the production of the flight systems. Comsat never accepted one of the models. Comsat accepted the other two and used them as satellite simulators to generate typical signals for a short time. The evident concern of the prime contract with the models is the schedule with which they were to be produced and the adequacy of the demonstration performances conducted by TRW for Comsat rather than the models' subsequent delivery to and use by Comsat.

Although the subcontracts' language and organization was similar to that of the prime contract, the purposes of parties were different. TRW's purpose was not to use flight spacecraft (as distinguished from the models), but to adequately perform its duties under the prime contract. TRW could not contract away all of the research and development. After the subcontractors had developed and fabricated those subsystems which were their responsibility, TRW assembled them and did that additional research and development in the integration of the subsystems and procedures, and the development of the test information programs and procedures for which it was still responsible under the prime contract. Unlike Comsat, TRW required the model subsystems as specific tangible personal property, which it used in the research and development phase of the prime contract. If the assembled models failed in TRW's hands, the preceding research and development by its subcontractors was irrelevant. So while the purchase of the models may be considered incidental to the purchase of the flight craft insofar as Comsat was concerned, the purchase of the model subsystems was as primary as the purchase of the flight subsystems insofar as TRW was concerned.

The principle that tangible personal property is not purchased for resale if it is purchased for use in a research and development phase of a contract for the production and sale of a custom-made item is well established, cf. *Alabama v. Thiokol Chemical Corp.* (1970) 246 So.2d 447, affd. 246 So.2d 454. But the case presented by this petition is a demonstration of the additional principle that the property purchased from a subcontractor for use in a research and development effort of the purchaser is an end item to the researcher who so uses it, whether the property is a product of special research and development by the subcontractor or is of pre-existing and standard design.

The question remains whether the purchase prices of the model subsystems are the unit prices attributed to them in the subcontracts, specifically, whether the research

and development costs reimbursed in the unit prices for the models should be attributed to both the models and the flight satellites. If that is proper, only that part of the unit price attributable to the direct fabrication of the models plus the prorated share of the research and development should be considered the actual price TRW paid for the purchase of the model subsystems.

Petitioner argues that the high unit prices in the prime and subcontracts were not the result of any agreement that the models were worth more than the flight systems, but were simply a recognition that most of the research and development had to be performed during the development of the system, which occurred during the model phase of the prime contract. The research and development, says petitioner, was too costly for TRW and its subcontractors to carry until full contract performance and so that part of the models' prices intended to pay for the research and development effort should be attributed in part or whole to the flight craft. The contracts, however, in addition to the high unit prices stated for the models in comparison to those stated for the flight satellites had articulated provisions for progress payments based on incurred cost. The structure of the contracts appears to have been capable of adjustment to lower the price of the models and extend the provisions of the progress payments to the preceding research and development if that had been a more accurate expression of the parties' intent. Consequently, it appears that the agreement's specified prices for the subsystems were not intended as a disguised progress payment. TRW's adequate performance of the model phase of the prime contract would earn it the largest portion of the total prime contract price, so it is understandable that TRW agreed to a correspondingly high price for the purchase of the model subsystems were the vehicles for that performance. Since the contracts do not appear to be ambiguous or inaccurate expressions of the agreed prices, and under the circumstances the pricing terms could hardly be attempts to avoid taxes, there is no basis for revising the pricing terms for the purposes of the Sales and Use Tax Law.

Accordingly, we redetermine the amount due without change in the amount of tax.

Done at Sacramento, California, this 19th day of March 1975.

John W. Lynch, Chairman
William M. Bennett, Member
George R. Reilly, Member
Richard Nevins, Member

Attested by: W. W. Dunlop, Executive Secretary