### R-390A Teledyne vs Army ASBCA decision Appeal, August 27, 1968 Larry Haney, 4-22-2022

Tom Marcotte found an interesting Appeal's document for an ASBCA decision about Teledyne Corporation versus the Government (Army), some time in 1966. The ASBCA (Armed Services Board of Contract Appeals) was created by a joint directive of the Secretaries of the Army, Navy and Air Force. It is the authorized representative of the Secretaries in hearing and determining contractor appeals. Thus the Board, with its three contract appeals panels, has a key role in settling disputes for defense procurement.

It was for extra compensation and an extension of time on Contract No. DA-11-022-AMC-723(E) dated 29 June 1963 (Order No. 37856-PC-63). It was for the alleged disruption of their production schedule because of the government requirement that approval of a quality assurance program be obtained, and other problems. The final ASBCA decision was given on 20 February 1967 and the Government prevailed, hence this Apeal on August 27, 1968 by Teledyne. It is quite revealing about the many problems Teledyne had manufacturing the R-390A's and involves Imperial Electronics Inc. and Amelco Inc.

I'm writing this brief version of the document because the original is hard to read. You can see it here on Google Books, starting on page 33-602:

https://www.google.com/books/edition/Board\_of\_Contract\_Appeals\_Decisions/V3rt\_pDx7kkC? hl=en&gbpv=1&bsq=stewart-warner%20R-390%20

Before I started writing it, I created a legible copy of what is on Google Books. You can see it here: https://www.r-390a.net/R-390A%20Teledyne%20vs%20Government.pdf It is very entertaining and informative.

The Contract No. DA 11-022-AMC-723(E) dated 29 June 1963 was in the amount \$2,863,912.50 for delivery of 3,090 R-390A/URR at a price of \$918.75 each.

The dispute concerns Teledyne's demand for additional compensation of \$111,175.67 and a delivery time extension of 93 days. This is due to unnecessary pilot runs and procedural changes imposed by the Army. The requirements resulted in changes increasing contract performance costs. The pilot run requirements disrupted and delayed the contract work program, required quality control procedure revisions, and increased the test time and engineering studies necessary to support Government administration of the initial production phase. Also at issue is a group of matters that Teledyne regards as already resolved for the same specifications by Technical Action Requests approved under an earlier contract:

1 Audio Output Impedance Test	5 Antenna Input Impedance
2 Electron Tubes from Savon	6 Mobile Frequency Stability Test
3 Bounce Preconditioning	7 Quality Control Procedure
4 Cross Modulation test	8 Z-213 Coils

The contracting Army officer determined one minor allowance on Teledyne's claim in the amount of \$2,533.65 and a time extension of 30 days. It is denied by the Government that Teledyne was delayed as a result of the electron tube problem and, it was solely the result of its own unauthorized actions, namely ordering electron tubes intended for use in the R-390A receiver from unauthorized, unapproved sources.

The Government contends that Teledyne's inspection system, although previously submitted had not been approved before production began. And, the bounce preconditioning process and some test procedures were being performed incorrectly; improper test equipment was being used and some was lacking; there were nonstandard and nonapproved components, nonapproved tubes, and improper cords and fittings were

incorporated into the production units. Poor workmanship and defects were disclosed by Government inspection, so Pilot runs and quality control improvements were required.

## The Details:

Contract No. DA 11-022-AMC-723(E) was awarded to Imperial Electronics Inc on 29 June 1963 (order number 37856-PC-63) as a result of advertised Invitation for Bids which had been issued by the Chicago Procurement District US Army.

The purchase was for the US Army Electronics Command. The Administrative Contracting Officer was designated at the Los Angeles California Procurement District. The radio equipment Schedule for the R-390A Receivers Production Board of Contract quantities were deliverable f.o.b. at specified shipping points beginning on 24 June 1964.

The contract R-390A's were required to be manufactured in accordance with Specifications in MIL-R-13947B, as revised by Amendment No 4 dated 13 June 1962 and Signal Corps Drawing and Data List SC-DL-248775-E with stated exceptions. Contract terms include Inspection Standard Form 32 Sep 1961 Ed, and a contractor's inspection system was required by Additional General Provision No 68, as follows:

# 68. CONTRACTOR INSPECTION SYSTEM:

The contractor shall provide and maintain an inspection system acceptable to the Government for the supplies and services covered by this contract. It shall be in accordance with Military Specification MIL-1-45208 (Army) as amended below. The description of the inspection system shall be submitted in triplicate to the Contracting Officer at least 75 days prior to first delivery schedule. Approval must be obtained prior to initiation of production. If the written inspection procedures require correction, the contractor will correct the deficiencies and will make additional resubmissions until approval of his written inspection procedures has been obtained.

### 4.1 CONTRACTOR'S RESPONSIBILITY:

The contractor (Teledyne) is responsible for the performance of all inspection requirements as specified. Inspection records of the examination and tests shall be kept complete and available to the Government as specified in the contract.

The original contract provided for use of a Government loaned R-390A Receiver set of earlier Stewart Warner manufacture as a model, but a set representative of Teledyne Corp manufacture (Order 35064-PC-62-Al-41 Serial No 29) was substituted as the model, as requested by Teledyne.

Explanation for the foregoing substitution begins in a business merger which included the acquisition of Imperial Electronics Inc. At the time the present contract was awarded, June 1963, Teledyne Systems Corporation, was already manufacturing the same R-390A Receivers under separate Contract No. DA 36-039-SC-79620 which earlier, during 1961, had been awarded originally to Amelco Inc. The Teledyne Systems Corporation afterwards acquired the company and business of Amelco Inc, and by mid 1963, as a result had an operating facility for R-390A Receiver production. When the present award came about, Teledyne Systems Corporation was showing some interest in acquiring Imperial Electronics Inc, and performing the instant work Contract No. DA 11-AMC-723-E under the present contract.

During the fall of 1963, the Teledyne Systems Corporation completed its acquisition of Imperial

Electronics Inc, which was then known as Teledyne Systems Company or Teledyne/Imperial Electronics Inc. Before the acquisition had been completed, the Government held a preproduction conference on 15 August 1963. In the conference a determination was made to change the designated place of performance to Teledyne Systems Corporation's Panama Street (Los Angeles, California) plant. The Army also advised Teledyne that the contract for R-390A Receivers was to be a "Chinese copy" of the Teledyne model.

It would have to contain the exact duplicate of parts that were approved by TAR (Technical Action Request) on the Amelco contract and specifically pointed out the proprietary items there, the variable frequency oscillator, the beat frequency oscillator, and the mechanical filters. Teledyne was referred to Procurement Material Document PMD No. 28-A, requiring a descriptive breakdown and list of non-standard and unstandard parts and materials. This had been fully complied with under the earlier Teledyne contract; and in the same conference, instructions were to do the same for the present contract.

The Government's same representative instructed Imperial Electronics Inc to use every component possible which had been used on the Teledyne contract. And he said that for any vendor substitution, a TAR would have to be submitted. But there was one significant difference between requirements under the present award and those under the earlier Teledyne contract. Specification MIL-I-45208 requires the contractor to provide and maintain an adequate and complete inspection system acceptable to the Army. But the provisions just described were not part of the earlier Teledyne contract. For the present contract, the Government's representative at the preproduction conference made comment there were areas of Teledyne Corporation's quality control which were unsatisfactory; and submission of an updated quality control and inspection system would be required for Government approval.

Since the Teledyne production model was to be used, arrangements had been discussed during the same 15 August 1963 conference for a waiver of preproduction model requirements under the present contract; and such waiver was granted. After the conference, however, production under the present contract (Imperial) was not immediately begun. The Teledyne contract production was still being done; and in fact deliveries continued on into 1964. Early during the same year, while the Teledyne contract deliveries were still being made, the Army Material Command had received from the field, reports of defective R-390A Receivers which had been manufactured under such contract. One such report had been made by the Office Deputy Chief of Staff for Logistics H.Q. of the Army on 4 February 1964, covering three separate shipments. One result was a Government conference convened of both Army and Air Force personnel for discussion of this problem. The Air Force conferees were representatives of one of the consignee Bases which had received some of the defective Teledyne contract receivers.

During May 1964, one Government representative had occasion to inspect and test a stock of the Teledyne contract Receivers which had been in storage unused at Tobyhanna Army Depot. These were units which had been sent in to the Depot as defective and classified as unusable. From the Tobyhanna Depot stock, a random sampling of five 5 Receiver units were taken and tested by the Government in accordance with contract requirements, with a Teledyne Corp engineering representatives present. Three of the five units failed significantly in such respects as frequency stability, sensitivity and one of the meter instruments did not work corretly. One of the Government's objectives was investigative for the purpose of determining what adjustment if any should be made under the earlier Teledyne contract. The adverse test results, represent part of the Government's whole experience preceding Teledyne's commencement of production under the present Imperial contract. Additionally, the Government in that same year had received continuing reports of other defective Teledyne Receivers.

By 13 July 1964, the Government had decided to require 100% inspection for some of the units as a pilot run in the initial production phase of the present Imperial contract. So, a Government Production Engineer

representative was assigned temporarily to the Teledyne's plant, and arrived there on 15 July 1964, along with a Government "Key" Inspector to serve as quality assurance advisor. The Government Advisor was to determine if Teledyne has a satisfactory inspection system, and to test some Receivers for determination whether Teledyne's processing was under control. His instructions were that if Teledyne's quality assurance system was not controlling the production process, some action should be taken to see that Teledyne did set up inspection and quality control systems sufficient for the purpose. For the pilot run, the number of units was extended to approximately 200, and it was found that thirty five of the first fifty Imperial contract Receivers inspected and tested were found deficient.

The requirement for prior approval of Teledyne's inspection system had been discussed at the preproduction conference. Now, nearly a year later, Teledyne had begun production under the present contract without having its quality control system approved; and was not approved until 13 August 1964. Meanwhile the Government's Production Engineer, discovered that the bounce preconditioning process (MIL-R-13947B, Sig C par 4.6 and cf 3.15) was being improperly performed. During the bounce process, the Receiver's were being held by the handle so as to follow the motion of the bouncing Package Tester. The effect was to defeat the purpose of shaking loose any foreign matter or untightened connections. The bounce process was corrected promptly by Teledyne's fabrication and use of a simple wooden jig suggested by the Government's Production Engineer. Information indicates this was put into use some time the week following disclosure of the problem.

As to the output impedance, during certain required tests (MIL-R-13947B Sig.C: see paras 3.13 37 and 4.37) the Government's results showed that from twenty to twenty-five percent of the first fifty Receivers run could not attain the specification impedance.

And some Z-213 coils had been tested originally as a component for the Teledyne contract production, and a number of them were found not performing in accordance with specification standards. Such results were subsequently confirmed by the Government's special Inspection representative for the present contract. But, Teledyne incorporated the bad Z-213 coils in the Receiver production units on the assertion that there was "nothing wrong" with them, but claimed that the Government testing equipment was faulty. So, the coils were disassembled and it was discovered they had been incorrectly wound. The pitch was wrong, and there was a miswiring at the head of the coil assembly. The record indicates that the order for the Z-213 coils had broadened the specification tolerances in the supplier's favor, without prior Government approval. The impedance and coil deficiencies were resolved by Technical Action Requests. Teledyne recognized that the impedance problem involved some discrepancy in the circuit parameters, and the Technical Action Request was approved.

The Government's pilot run test program was not suspended or interrupted by any of the test failures or deficiencies which did arise. Teledyne was promptly advised informally of any test failures, so rework and corrective measures could be undertaken immediately. The record shows there was a lack of equipment for the Cross Modulation and Mobile Frequency Stability tests. Those tests had to be deferred until equipment was available. But, both were Group C tests, and only one Receiver of the first 200 produced had to be subjected to the test run MIL-R-13947B Sig C 4.5 3.1. No significant delay appears. There was a problem with the Mobile Frequency Stability test and Teledyne requested substitution for the test run of an adaptor plate of his own fabrication, and initiated the substitution request by Technical Action Request which was approved on 29 September 1964. Teledyne requested an alternate method of ensuring Antenna Input Impedance as an improvement to eliminate complex algebraic computation associated with the test readings, and it was granted.

On 17 July 1964, the Government's inspection disclosed departures from the specifications in respect to

materials and components used, a commercial type power cord used. The condition was immediately brought to Teledyne's attention and they replaced it with the specification material. Each of the first fifty Receiver production units incorporated a number of unapproved components, such as capacitors, resistors, connectors and sockets. They had been substituted in the production units without prior specific approval, which was requested on 7 October 1964. The approvals were completed on 3 December 1964.

The Government's advisor representative reviewed Teledyne's procedures for the mandatory tests under Groups A, B and C; and found them wholly "inadequate for the job". During late July 1964 he spent considerable time rewriting draft procedures and submitted them to Teledyne's staff engineer; who reviewed them, made changes of his own, and adopted them as the company's procedures. The extended pilot run, about 200 Receiver's was completed, regular sampling inspection on a lot basis was initiated and continued on during the remainder of the contract with only few problems arising.

As to the Electron Tube problem, the matter was due to confusion over the source of Teledyne's tube components. As it developed, the tubes were of proper current manufacture. The markings on the package had been the cause of the Government's exception originally.

#### The DECISION:

The main consideration is the present contract terms requires Teledyne's quality control system to have prior approval beforehand, and complete implementation during the course of production. Those provisions must be recognized here and given effect unless, there was some change by agreement incorporating the inspection and control systems under the previous Teledyne contract. We found none.

There had been discussion of inspection changes under the Teledyne contract, and Teledyne introduced correspondence as evidencing an agreement. But this nowhere shows any intent to carry the earlier contract procedure or system over, or to affect the present contract production. Uncontradicted testimony on the point is clear that, as part of the preproduction conference, the matter was so explained to Teledyne's representatives. We are satisfied Teledyne knew the company remained subject to performance standards under the present contract.

Requirements under the contract and specification provisions in MIL-R-13947B, give the Government clear right to establish inspection upon a hundred percent basis for the pilot run. We agree with the Government that results justified extension of the pilot run testing, still under the Government's original and complete right to test.

Additional activity necessary to implement the quality control system, was in no sense an extra under the present contract, but the result of a more comprehensive quality requirement, as compared against the earlier Teledyne contract. Records show Teledyne's responsibility for each: either as due to specification deficiency or failure, oversight on point of his own performance obligation, or matter requested by him voluntarily for relaxation of requirements. We have already indicated why the Government's request for cancellation of partial allowance should not be granted. We find no entitlement in favor of Teledyne.

Accordingly the partial allowance \$2,533.65 and 30 day extension as originally made by the contracting officer's final decision is hereby CONFIRMED AND GRANTED but; the appeal is DENIED in all other respects.