



**OPERATIONS COMMITTEE  
NOVEMBER 18, 2004**

**SUBJECT: 2550 RAIL VEHICLE PROGRAM**

**ACTION: RECEIVE AND FILE**

**RECOMMENDATION**

Receive and file the quarterly report on the 2550 Rail Vehicle Program for the period July 2004 through October 2004.

**ISSUE**

On April 24, 2003, the Board awarded two key contracts to the Program:

- A five-year contract to AnsaldoBreda S.p.A. (AnsaldoBreda) for a base buy fleet of 50 light rail vehicles (LRV). These 50 LRV's will be utilized for both the current Pasadena Gold-Line and the future Metro Gold-Line Eastside Extension. These LRV's will also be designed to operate on any existing or future light rail alignment(s), which the Los Angeles County Metropolitan Transportation Authority (LACMTA) operates.
- A rail-consulting contract to LTK Engineering Services (LTK) for as-needed technical support to the Program.

In addition, the Board directed staff to provide quarterly updates on the status of the Program.

**BACKGROUND**

Based on the lessons-learned with the P2000 LA Standard Car contract, Rail Operations created an LRV Integrated Project Team (IPT) responsible for managing the Program. An IPT is established whenever a capital project of significant importance requires a very dedicated management team with the ability to act and react quickly to Program issues.

For this Program, the IPT is organized under Rail Fleet Services and consists of the Project Manager, Deputy Project Manager, Contract Administration Manager, Senior Contract Administrator and fully dedicated staff from other Metro departments including Engineering. The IPT also benefits from the support of as-needed specialty engineering services through the Program's contract with LTK, one of America's oldest and largest rail-transportation consulting firms.

The additional engineering participation provided by LTK is an integral part of the IPT and its ability to expeditiously respond to specific engineering issues as they arise, for example, in the areas of signaling and automatic train control expertise. The IPT's primary focus is dedicated towards on-time delivery, within program budget, and on the successful integration of the systems and subsystems affecting the LRV.

**PROGRAM STATUS**

1. Summary Status: July 2004 through October 2004:

The various activities and accomplishments of the IPT noted below are designed to expedite and maintain the 2550 Rail Vehicle Program schedule to deliver 50 LRVs to LACMTA by June 2007.

<b>The IPT Activities On The 2550 LRV Contract with AnsaldoBreda</b>	
<b>Actions or Accomplishments</b>	<b>Month</b>
	July 2004
1. The IPT conducts Design and First Article reviews with subcontractor and suppliers in Sweden, France and Spain for the LRV couplers, passenger doors, header signage and communications.	
2. AnsaldoBreda informs the IPT in Italy of an alleged theft of 55 tons of stainless steel for the 2550 LRVs from one of its Italian steel suppliers. Overall schedule impact, if any, is unknown, but AnsaldoBreda states that the first two vehicles are still on schedule	
3. The IPT conducts on-going weekly conference calls with project staff in Los Angeles, New York, Pistoia, and Naples Italy. The teleconferences discuss the status of Contract submittals, reviews and approvals, specific design issues and planned activities for the week.	
	August 2004
1. The IPT continues to review and comment on AnsaldoBreda technical submittals.	
2. AnsaldoBreda plants in Pistoia and Naples were closed during August for the annual "European" vacation that is taken by all staff and management.	
	September 2004
1. The AnsaldoBreda Vice President and the Project Engineer reaffirm AnsaldoBreda's commitment to the Contract & Delivery Schedule.	
2. The IPT conducts on-going weekly conference calls with project staff in Los Angeles, New York, Pistoia, and Naples Italy. The teleconferences discuss the status of Contract submittals, reviews and approvals, specific design issues and planned activities for the week.	

3. The IPT drafted the four-month look-ahead schedule for up-coming First Article Inspections, and travel to support these program management efforts.	
P2550, LRV Contract Paid To Date	
	\$31,108,718*

\*As of 10/31/04

LTK Activities Through The PS 8310-1267, Rail Consulting Contract with LACMTA	
Actions or Accomplishments	Month
1. Participates in all weekly IPT technical meetings. These are the in-house meetings to discuss status and technical positions prior to the weekly teleconferences with AnsaldoBreda.	July 2004
2. Participates in all weekly 2550 Program technical teleconference calls with AnsaldoBreda. LTK's technical expertise in certain areas, such as systems integration and electrical systems, is a beneficial augmentation to the IPT's expertise.	
3. Reviews and provides comments and recommendations to all AnsaldoBreda Technical Submittals. LTK's technical expertise is especially valuable in the review of certain technical documentation from AnsaldoBreda.	Through
4. Attends and participates at meetings with AnsaldoBreda in Los Angeles. LTK's experience with previous Metro LRV procurements provides insight into lessons-learned.	
5. Attends and participates at meetings with AnsaldoBreda in Pistoia, Naples, and various subcontractor sites in the U.S. and Europe. LTK's experience with other LRV manufacturers is an asset to the IPT.	October 2004
PS 8310-1267, Rail Consulting Contract Paid to Date	
	\$1,133,018*

\*As of 10/31/04

## 2. Discussion of Status

The Program now has an IPT-approved Program Schedule for all Contract milestones, and submittals as well as for the LRV production and deliveries. The IPT-approved schedule maintains the Contract requirement to deliver 50 LRVs to LACMTA by June 2007. The Program continues to transmit, review, comment and approve Contract drawings and Contract submittals electronically via the use of the internet-based "Project Quest."

"Project Quest" is an Internet program licensed to LACMTA for use as a Program management tool. "Project Quest" provides the IPT and AnsaldoBreda with the ability to transmit Contract documents including large drawings and letter correspondence almost instantaneously between Italy and Los Angeles.

It also provides an electronic file of all 2550 Program related documentation including the Contract and many reference documents that is available to the IPT, LTK, and AnsaldoBreda. The IPT controls restricted access and security for sensitive files in "Project Quest", such as negotiation positions and internal memos.

From July 16<sup>th</sup> through July 30<sup>th</sup> 2004, the IPT members from Rail Fleet Services and Contract Administration with LTK's project engineers conducted a technical design reviews and first Article Inspections at AnsaldoBreda's subcontractor facilities for the brake assembly in Maryland, for the coupler assembly in Sweden, for the passenger door assembly in France and Spain, as well as in the AnsaldoBreda plant in Pistoia, Italy. The IPT and the noted support staff reviewed the coupler assembly, the passenger door assembly and header signage and communication equipment. AnsaldoBreda has completed all subcontract negotiations for the major subsystem vendors for the LRVs.

In September 2004, AnsaldoBreda Vice President/Project Manager visited IPT in Los Angeles to reaffirm AnsaldoBreda's full commitment to the Contract Schedule of delivering the first two vehicles in June 2005. The IPT emphasized that far more than verbal commitment is necessary and that the AnsaldoBreda activities over the next quarter will evidence their actual dedication to schedule adherence. In September 2004 AnsaldoBreda submits an abbreviated schedule for first two vehicles demonstrating delivery in June 2005.

In October 2004, AnsaldoBreda submits a revised full schedule which forecasts the first light rail vehicle still on schedule for delivery in June 2005. There were concerns surrounding possible delayed delivery of the second car in June 2005. The remainder of the schedule though appears to be on time for the production and delivery requirements.

The IPT informed AnsaldoBreda that none of these events or incidences were due to any action or inaction on the part of LACMTA and as such are not excusable delays under the terms of the Contract. Therefore, there is no extension of the Contractual Schedule due to these aforementioned events.

The IPT strongly expressed concern with the vehicle delivery schedule, especially the first two vehicles, and noted that the Liquidated Damages provisions of the Contract will be strictly imposed. The IPT continues to calculate the Liquidated Damages and is set to deduct such damages from the next payment to AnsaldoBreda.

The IPT then directed AnsaldoBreda to provide a schedule mitigation plan that will bring the schedule into alignment in all areas of the Contract Work. As part of the mitigation plan, the IPT directed AnsaldoBreda to explore working extended workweeks, weekends, and/or additional shifts in conjunction with other efforts being reviewed.

In addition to the dialog and discussion between the IPT and AnsaldoBreda's project team for the 2550. Metro's Rail Operations General Manager has held additional conference calls and meetings with AnsaldoBreda's executive management in New York and in Pistoia, Italy. During these calls, AnsaldoBreda's Vice President of Operations and Production reassured Metro that the Los Angeles 2550 Rail Vehicle Program was the top priority project within their organization. General Manager of Rail Operations reminded all staff present that both parties executed the Contract and that that Contract must be adhered to without fail. All staff present for these calls was reminded of the importance of the project and of the high expectations of both staff and the Board.

In closing comments during the meetings, the General Manager of Rail Operations noted that the IPT during November and December 2004, will be traveling abroad to finalize all phases of the car for production. It will be during this period that AnsaldoBreda's submitted schedule can be reviewed from a first hand and on-site approach. A follow-up meeting resulting from these exercises is expected between the General Manager of Rail Operations and AnsaldoBreda's Vice President of Operations and Production to further ensure that all parties are working towards the common contractual goal of a successful and productive project.

### **NEXT STEPS**

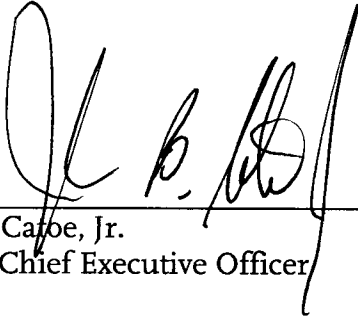
The IPT and AnsaldoBreda will be conducting the last First Article Inspections other than the assembled vehicle during the next three months of November, December, and January.

During this period the IPT will continue closely monitoring and expediting where necessary for all scheduled activities involved in constructing and supporting the 2550 rail vehicle.

LRV Carshell production is well underway in Pistoia in support of the new rail-car fleet. Presently structural floors, sidewalls, and roofs are being assembled on the production line using automated as well as manual cutting, welding, and assembling procedures. The work has started on the first three cars. There is a full-time Metro on-site inspector provided by the LTK contract to verify the quality and attention to detail during all phases of assembly of the fleet, effective April 2004 until completion.

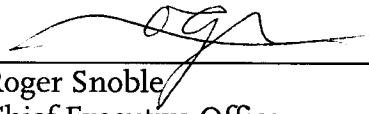
Final Contract Document Requirements List (CDRL) submittals from AnsaldoBreda will continue and the IPT will review and comment or approve as necessary. The IPT continues to communicate on a daily basis and conduct full team meetings at least once a week to discuss schedule milestones.

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