

Commemorative Air Force B-25 “Yellow Rose” Painted and Weighed at L-3/PID in Waco, Texas

Article by John Johnston, Lori Kleine, Jerry Pierson, and Valentin Velasquez

The Mass Properties Group at L-3/Platform Integration, Waco, Texas, recently had an opportunity to come face-to-face with a piece of living history. The company recently painted the B-25 shown above (and on the cover), and then subsequently weighed it prior to flight. The action was an in-kind gift to the Commemorative Air Force. The following article provides some insight into issues that were addressed by mass properties personnel while the aircraft was at L-3 for a fresh coat of paint.

For more information on this aircraft and others like it go to the following website: <http://commemorativeairforce.org>



The B-25 aircraft normally sits on the ground at a 1.1-degree nose down attitude. The digital level from the SAWE “Mass Properties Measurement” class was used to determine the current attitude angle of the aircraft. The normal process for raising the nose to level the aircraft for weighing would be to service the shock strut. However, the aircraft owner did not want to do this as the plane is over 70 years old and the strut adjustment could have potentially caused other issues.



Valentin Velasquez and Lori Kleine after the aircraft was set up to roll onto the scales.

After calculating the necessary adjustment using a wheelbase of approximately 200 inches, the data indicated the nose gear of the aircraft would need to be raised almost four inches to bring it to a level attitude. Val Velasquez and Jerry Pierson built a series of three ramps to meet this nose gear height requirement and to interface with the GEC AN60-6 platform scale and ramps. However, due to the added ramp length and relatively short tow bar, flight line personnel were required to push the aircraft backward up the ramps to avoid having the tow truck sit over the scale.

Inventory on the B-25 was a little different since this aircraft normally flies with boxes of tools, spare parts, and rags for oil drip cleanup. There was no current Chart A available to use for a formal pre-weigh inventory.



GEC representatives Derek Moore and Jesus Lerma (left and center) with L-3's John Johnston (right) compare the manual readings with the Tablet results.



John Johnston, Lori Kleine, Jesus Lerma, Derek Moore, Jerry Pierson, and Valentin Velasquez

The photo above shows the group who weighed the aircraft with GEC AN60-6 scales with Wi-Fi sending signals to the new GEC Tablet weighing system. Everyone was pleased with the flawless operation of the system.

[Editorial Note: Please read the article in this journal about the capabilities of the weighing system from GEC.]



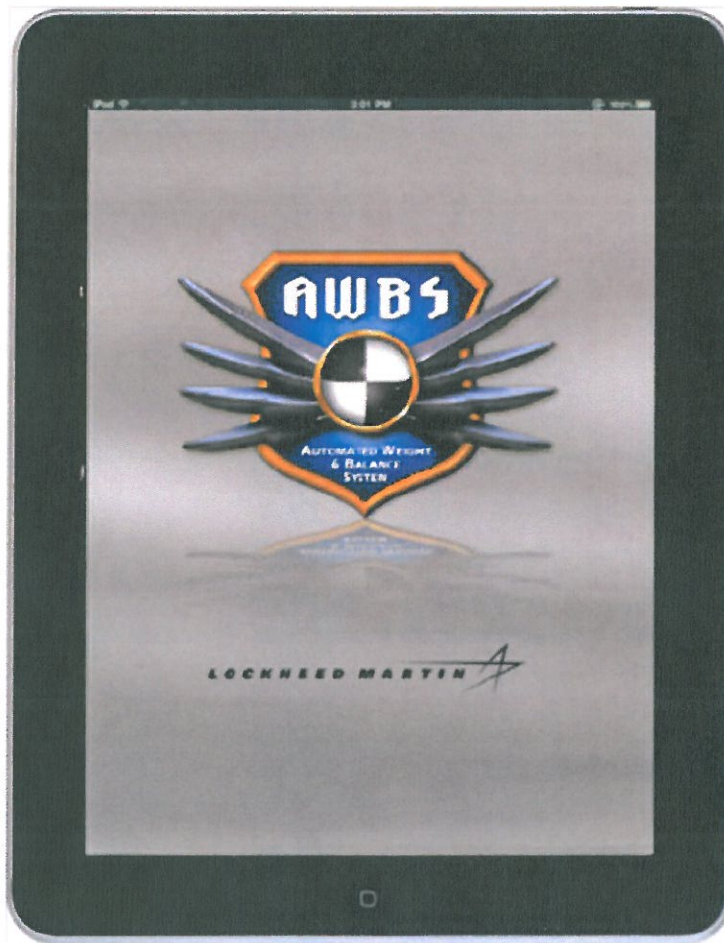
As Jerry Pierson noted, "It is great to be around these aircraft when they start up. The smoke and the vibration are from another time in history. Those of us who work at L-3 in Waco were really lucky to have this opportunity to relive a little aviation history."



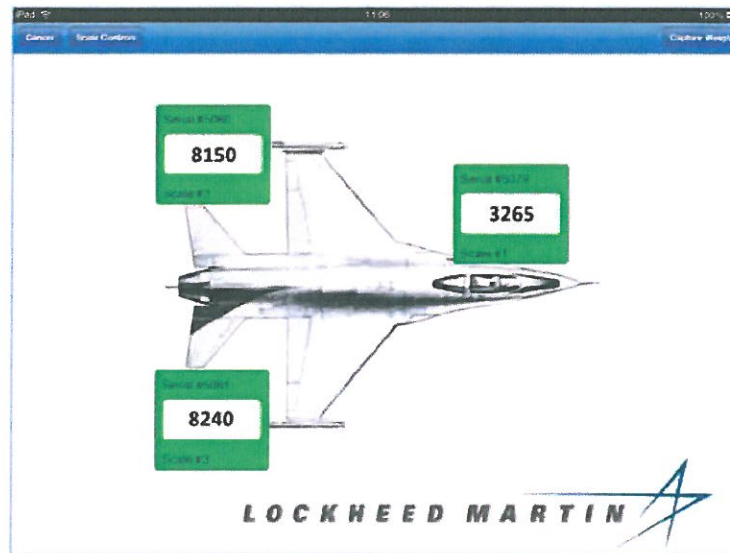
GEC, remaining on the leading edge of advances in weight and balance, has launched the iPad and Android versions of weighing systems. GEC and L3 weighed the B-25 on the cover of this SAWE Journal with the Samsung Galaxy Tab 2 10.1 (Android). The weighing process went flawlessly, safely, and quickly. Our feature-rich capabilities offer flexibility to the user. One feature specifically important to L3 was the “save weigh” capability. This made it very easy for L3 to have a weighing report immediately without having to bypass any of their security protocols.

GEC offers an iPad option specific to the military, incorporating AWBS.

GEC has partnered with Lockheed Martin to design the iAWBS aircraft weighing system for their military aircraft. This system interfaces the automated weight and balance system (AWBS) with GEC’s wireless aircraft weighing system (s). AWBS allows the capture of weights from GEC’s weighing system to directly populate into the AWBS Form B Worksheet. This allows complete integration from GEC’s aircraft weighing system to AWBS on the desktop and subsequently to the AWBS Centralized Server. It enables the user to complete their Form B worksheet during the weighing process.



Red and green colors will indicate whether the weighing is within the required tolerances while still in the hangar. The iPad provides drag and drop scale rotation with automatic arm change capability.



This fully functional iPad has a larger screen for improved viewing and easy maneuverability. The iAWBS app is currently available on iTunes as a free download.

Please contact GEC at 800-551-6038 or visit our website at www.GECscales.com for more information.

iPad is a registered trademark of Apple Inc.

From the Editor

Shortly after receiving the article about weighing the “Yellow Rose” from Jerry Pierson, I received an e-mail forwarded by Robert Johnston, Executive Director, Emeritus, of the SAWE. This e-mail contained a collection of photos and news about Doolittle’s Raiders. Since Doolittle’s Raiders used B-25s in an unbelievable manner during their bombing raid of Tokyo early in World War II (April 1942 — a significant date for me.), I thought that this would be a good place to remind people of their heroic venture.

I used the contents of that e-mail and the Doolittle's Raiders website (www.doolittleraider.com) to put together the following article.