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FRONT COVER—Martin B-26B, s/n 41-17977, has just rotated on its takeoff run in this fine color transparency by an unknown photographer. Called the widower because of the number of fatal accidents during its teething period, the B-26 *Marauder* vindicated itself later in the hands of trained pilots who grew to love it. It went into combat in April 1942 in attacks on New Guinea, and saw service in North Africa, Europe, Alaska and the Aleutians by war's end.

BACK COVER—Lindbergh's *Coupe* painted by Robyn Clark features the customized *Monocoupe* D-145 built for Charles Lindbergh by the Lambert Aircraft Corporation in Robertson, Missouri, in 1934. Licensed in the Restricted category because of its extensive modifications, it carried NX-211, the same as its famous predecessor *Spirit of St. Louis*. The aircraft is currently displayed in the Lambert Field passenger terminal only a mile from where it was built.

INFORMATION FOR AUTHORS

- Manuscripts typed on one side of 8½x11-inch paper plus two copies. Include author's name on title page.
- Double space between lines.
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A particular subject should not be longer than two parts. Exceptions may be made where subject matter has outstanding merit. Authors contemplating a series of more than two parts are advised to query editor first. Ideal maximum manuscript length for a single insertion is 30 pages, including references, etc. For style and form consult recent *Journals*.

To gain a quick referral among editorial committee, it is suggested one or more Xerox copies be included. Also please include *brief author's blurb* written in third person, together with *author's photo*.

*This is the myth -
Who ever wrote this didn't
read the article*

it was making the planes in "formidable numbers."³⁶

The government, which was putting together the senator's committee to investigate *defense contracting abuses*, was angry at Martin for working below capacity.³⁷ Mr. Martin retorted that OPM demands were unreasonable; he didn't have what he needed to make the planes. He didn't have aluminum because the aluminum monopoly hadn't been broken up in time for the onslaught of airplane orders. (Mr. Wrigley was even foregoing foil on his chewing gum to free up supplies for the 50,000 planes intended for the Arsenal of Democracy.) Nor did Martin have enough complex subassemblies, such as government-furnished propellers. More than a few subcontractors were behind. One of the most vexing was Pratt & Whitney, which was having trouble getting good exhaust manifolds.³⁸

While Martin waited through May, June and July, propellerless B-26s were towed from his building and stored outside. During this otherwise quiet period there were two accidents at the factory.

Early in June the 22nd BG and 18th RS ferried three B-26s to Martin, ostensibly for fuselage reinforcement.³⁹ Lieutenant Franklin Allen copiled on the recall flight and remained at Martin for extraordinary training.

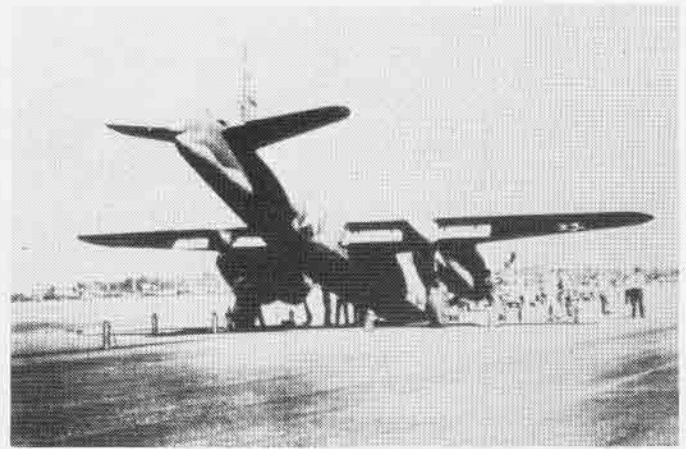
The first B-26 was still at the factory. Its tail gun position had been reshaped to the style planned for the B-26B. However, 40-1361 was out of commission from a landing accident which further reshaped it at the end of April.⁴⁰ Number 1375 was apparently prepared as its replacement. It was about to meet the same fate.

On the morning of June 11, Allen and three Martin employees took 1375 up. The factory pilot was Mr. E.D. Shannon. Two other Martin employees were to study parts of the plane during "maximum" takeoffs and landings.⁴¹ (Such tests are inherently dangerous since they attempt to determine the bare minimum of runway needed; a catastrophic stall was a distinct possibility.)

Initially the flights went well. Number 1375 took off and landed safely four times. The fifth brought a nose gear failure.⁴² Records are ambiguous about the cause. The Form-One-A mentions "Number one nose gear" as if there was a selection that day. (An improved assembly soon appeared in production. It featured more caster angle and a stronger strut, and Martin may have been testing it at the time of this accident.)

Whatever nosewheel was attached, it didn't line up with the runway when it touched down. It made contact at a 45-degree angle, snapping the leg. A similar flaw in the alignment mechanism may have brought the downfall of 1372 and 1361 earlier. Number 1375 went in for repair and Lt. Allen returned to Langley Field, missing the next accident at the factory.

On June 21 the first deaths occurred in a B-26. An aircrew of two fell during an acceptance flight. Their plane had been flown a couple of hours the previous day and again briefly just before its last flight. About two minutes into takeoff, 40-1386 crashed into woods near the factory. Not only was there very little wreckage suitable for study, but the Air Corps' report is missing. (Indeed, there may not have been one if the plane was not yet Army property.) The news media reported a backfire followed by smoke.⁴³ This suggests an



40-1375, with a special tailgunner's position, was damaged during maximum takeoff and landing tests. (Directorate of Aerospace Safety)

engine problem. However, hearsay spread among the 22nd BG that the plane rolled over and crashed due to a flap malfunction. Such divergence of stories emphasizes one of the basic problems in accident investigation: lack of firsthand knowledge. Most likely, the cause will never be known. Martin lost copilot A.J. Bowman and the Army lost Lt. Col. Elmer D. Perrin. He had flown all the B-26s accepted to date and was probably the Army's most experienced B-26 pilot at that point.

Ten days later accelerated service testing resumed.

Although stunned by the death of their acceptance pilot at the factory, the Air Corps resumed Accelerated Service Testing of the B-26 at the end of June 1941. At least the landing problems seemed to be under control.

None of the B-26s delivered so far had its dorsal turret; the Martin/GE unit wasn't available yet. To compensate for its weight, Martin had been arranging over 600 pounds of spares and accessories, including engine and canopy covers, chocks, wing stands, nosewheel jacks, engine and prop slings, and a wide variety of spare parts, in the rear fuselages of the two-dozen or so planes delivered. Without considering the effect on the balance of their new planes, 22nd BG/18th RS personnel had removed them, putting them into squadron inventories.

Abraham Olson knew it. He was an exceptionally experienced "Second Louey" and was engineering officer for his entire group. As part of the June TDY at Martin, he and the factory staff apparently put their heads together to determine one of the causes of hard landings: the group had removed Martin's "ballast" and thereby shifted the center of gravity forward beyond design limits. The April manual specified a range of 10 percent to 24 percent mean aerodynamic chord for the weights carried at the time. The unauthorized changes had moved the forward cg to about six percent.⁴⁴

Lieutenant Olson helped to get service testing restarted by putting bags filled with lead shot into at least one of the Patterson planes. Soon the pilot's manual called for 300 pounds of ballast at station 565 and another 300 pounds at station 615 in the fuselage.⁴⁵ Thus, Olson and Martin solved the center of gravity mystery, making the landing flare less critical and calling the Air Corps' attention to the balance issue.