



WESTWIND NEWS

2995 Lone Oak Circle • Eagan, MN 55121

A Quarterly Publication Regarding the Maintenance and Operation of Westwind Aircraft September 2007, Volume 1 Issue 1

The interchange of maintenance ideas, tips and pointers to improve maintenance and make the job easier is the goal of this newsletter. To keep the flow of information between maintenance personnel, to maintain aircraft systems integrity, to maintain high standards of maintenance and to help personnel keep their aircraft in a high state of airworthiness is also the purpose of this publication. To do this we need you dig down deep into that labyrinth of experience on the Westwind and share your ideas, comments and improvement ideas. Call Dale Printy at 651-994-1600 or forward your comments to Technical Publications at Worthington Aviation

Please keep the mail back cards coming. This helps Worthington and IAI keep the status of the fleet current in regards to the SB compliances.

Notes:

Worthington Jet Services, Minneapolis International Airport, is a *Worthington Aviation Westwind Product Authorized Facility* providing a full scope of maintenance services on the Westwind Aircraft. Brien Anders, General Manager, or Jeff Both, Director of Sales and Service, will be glad to answer questions about your specific service or inspection needs. They can be reached at: 612-727-3737, banders@worthingtonav.com, or jboth@worthingtonav.com. Worthington Aviation Parts Service stocks a large inventory of replacement parts to support the Westwind fleet. Barb Haviland, Director, Ed Nesbitt, Manager or Paul Corliss, sales rep – Corporate Sales, are available to help you with all of your parts needs. They can be reached at: 651-994-1600, bhaviland@worthingtonav.com, or enesbitt@worthingtonav.com, or pcorliss@worthingtonav.com. Worthington Aviation will oversee the Westwind technical support, technical publications, and the Authorized Service Center network. The contact information is: 651-393-3300 Direct, 651-261-7202 Cell, 651-994-1600 Switchboard. The Worthington team looks forward to working with the Westwind fleet of operators.

Technical Update

(ATA 25): 121.5 MHz ELT Deadline Reminder

The FAA issued a notice in August 2005 reminding operators that satellite processing of distress signals from 121.5 and 243 MHz emergency locator transmitters (ELTs) is scheduled to end on February 1, 2009. Operators will have to switch to ELTs operating at 406 MHz, which are more reliable and provide search-and rescue (SAR) agencies more complete information for detection by satellites. The National Oceanic and Atmospheric Association (NOAA) reports that about 99 percent of the 121.5- MHz distress signals it receives each year are false alerts. As a result, rescuers normally wait for extra satellite passes over the alert area or some other verification of an actual emergency before activating a 121.5- MHz SAR response. The delay can mean hours before a SAR mission is initiated for a 121.5-MHz distress alert. In contrast, the response time for a 406-MHz alert is measured in minutes. Because a 406-MHz beacon transmits its own unique digital identification code, the registered owner can be contacted for verification of an actual alert or asked to turn off a 406-MHz beacon transmitting a false alert signal. Quick verification capability means that in the event of a real emergency SAR personnel can be quickly mobilized.



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Service Bulletin Updates

1124-27-153 Rev 1

Title: Flight controls-Inspection and repair of the Inboard flap Actuators, P/N 193544-1

Effectivity: All Serial numbers

Released : May 25, 2006

Note: The original release of this service bulletin has created a misunderstanding among operators as to whether it is Mandatory or Optional. Revision 1 clarifies the Mandatory requirement to accomplish the service bulletin within the compliance time stated in the document. Aircraft in compliance with the original issue of this service bulletin require no further action.

Description: Investigation into the failure of numerous flap actuators has revealed that the worm gear has worn beyond allowable limits due to excessive torque forces applied to the actuator. These excessive torque forces are being caused by corrosion on the internal tube assembly sleeve, ball nut dragging, and/or incorrect shimming. Due to the high number of flap actuator failures, the 10,000-hour Chapter 5 overhaul requirement will be reduced to 3,400 flight hours or 5 years of actuator service, whichever comes first. These service bulletins will provide instructions to remove the flap actuators and send them to Telair International® for overhaul. Compliance with this service bulletin is mandatory. Currently installed inboard flap actuators, P/N 193554-1, must be replaced with new improved inboard flap actuators, P/N 193554-3 or vendor P/N V1390T100-7, by November 2007 or upon reaching the original life limit of 10,000 flight hours, whichever limit is reached first. P/N 193554-1 inboard flap actuators that have been previously repaired by Telair may remain in service until the next C check, not to exceed 800 flight hours or 3,200 flight hours component time in service, whichever comes first.

MAINTENANCE TIPS:

ATA 29

Does your emergency hydraulic pump cycle too often? The problem could be a faulty thermal relief valve. If there is no evidence of external leakage the thermal relief valve should be suspect for bypassing. This valve performs two functions, it provides pressure relief at 1250 +/- 100 psi. and has a built-in check valve to prevent pressure from backing up thru the pump. This happens to be the only check valve in the emergency hydraulic system. Emergency pressure should hold for at least 60 seconds and pump running time should not exceed 45 seconds.

The hydraulic restrictors in the thrust reverser system can cause erratic operations of the thrust reverser if they are installed in the wrong port of the T/R actuator. The restrictor and the regular union are similar in appearance and can be interchanged if not properly identified before installation. The restrictor should be installed in the "stow" line port and the regular union should be installed in the "extend" line port.

ATA 55

Horizontal pitch trim rod end adjustments are distinctly different even though the actuator itself is the same for both part numbers (543502-1 for the 1124 and 543502-501 for the 1123 and 1124A). Due to the critical nature of the adjustment, ordering and installing the correct unit cannot be over emphasized. The proper adjustment and configuration is preset and the parts marked accordingly on all Worthington Aviation stock actuators.



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ATA 27

When completing the installation of the flap actuators please accomplish all of the tests outlined in 27-50-00. This will help you have a smooth installation after accomplishing the prep work that is outlined in the AMM.

We have had many Westwinds through our facility requiring the I/B flap actuator replacement. In 95% of these aircraft we have found the flap actuators to be totally out of rig, both inboard and outboard. Our policy is to replace the inboard actuators I/A/W the Service Bulletin, we also remove the outboard actuators in order to set all four to the correct rigging per chapter 27. At this time the potentiometer should be checked for the correct rigging. Aviation Services Unlimited also replaces the flap horn hardware, inboard and outboard, which seems to have been neglected over the years.

(Submitted by Aviation Services Unlimited (405-787-8111))

Flap Vanes

We continue to find flap vanes not shimmed correctly. This condition will and does cause the potted inserts to fail which causes the forward vane rib and spar to crack. Vane replacement is very expensive. The correct way to install a vane is detailed in chapter 27-50-00, giving the correct amount of shimming washers. If the brackets seem to be under a spread pre-load, adjust the shims to correct. Remember that the instructions call out to re-install the same amount of shims previously removed –“BUT”- this is correct only if the previous technician installed the vane correctly.

(Submitted by Aviation Services Unlimited (405-787-8111))

FYI

Neither the manufacturer, IAI, nor its product support division (Worthington Aviation) can mandate the compliance of any service bulletin regardless of its designation (either “optional”, “recommended” or “mandatory”) with these exceptions:

1. Service Letters or bulletins, which are incorporated into the current manufacturer’s maintenance manual and /or assure continuous airworthiness. Example: SB1124 -55-020, found in the 1124 AMM, 5-20-06.
2. Service Letters or bulletins which are referenced in current FAA Airworthiness Directives
3. Service Letters or bulletins which are incorporated as part of the type certificate data sheets for the aircraft, engines, etc. The classification of service data by manufacturers with words such as ”optional”, ”recommended “or “ mandatory” Should be perceived only as a measure of importance placed on the publication for the operators benefit. Please note that Worthington Aviation does not utilize the “mandatory” classification on any service publications.

In summary, 1121, 1123, 1124 and 1124A operators are obligated by FAA regulations to comply with a manufacturers service publication only if it is presented in one of the above three categories

Westwind News:

Contributors: Ron Lasker (Worthington Aviation), Wayne O’Berg (Aviation Services Unlimited)

DISCLAIMER – This document is intended to provide Westwind operators an update on current safety/technical issues affecting their aircraft. It is for informational purposes only. Any technical content in this publication, where noted, will be submitted for inclusion in the next possible revision of a related technical publication, i.e., Maintenance Manual, Wiring Diagram Manual, Illustrated Parts Catalog, Computerized Maintenance Program Work Cards, Aircraft Flight Manual, etc. (Technical Publications are recognized as the only official publications for maintenance and service of the Westwind Aircraft.)

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September NBAA M&O seminar

Our Maintenance and Operations Meeting went well during the September NBAA event held in Atlanta, Georgia. We had hoped for a larger turn out of operators than we had. We will keep promoting the event. There was a drawing at the meeting for a Garmin GPS it was awarded to _____ Also at the meeting the Worthington Aviation Authorized Westwind Services Centers were introduced and plaques were presented.

FlightSafety News

Submitted by Tom Vail, FlightSafety International (FSI), Wilmington Learning Center

FSI Westwind Maintenance Course Schedule

FlightSafety's Greater Philadelphia/Wilmington Learning Center continues to offer Maintenance and Pilot training courses for the 1124/1124A Westwind Series. Upcoming Westwind Maintenance Course dates are listed below. Off-site training at the customer's location may be arranged by contacting Tom Vail at the phone numbers listed below.

Westwind Maintenance Course Schedule

2007-2008 Westwind Maintenance Initial Courses (10 days)

November 26, February 18, May 12, November 3

2007-2008 Westwind Maintenance Update Courses (5 days)

October 29, January 28, July 28, October 6

Westwind Engine Run & Taxi Course

Scheduled on Request

For more information or enrollment in any Westwind Maintenance Course, please call either Donna Boccetti or Tom Vail at 800-733-7548 or 302-221-5100. You may also reach them by e-mail at donna.boccetti@flightsafety.com or tom.vail@flightsafety.com. To learn more about the Greater Philadelphia/Wilmington Learning Center, logon to www.flightsafety.com, click "Training Locations," and select Philadelphia/Wilmington.

731 Engines contact information

Honeywell field service Jack Wolf



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Trimec Aviation Inc

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Garrett Aviation d.b.a. Landmark Aviation

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