

# Planes Stripped For Overhaul, Reassembled

By EDWARD M. McMANUS  
Tulsa, Okla. (UPI)—If you ever saw a jet airliner with its insides taken out, you would hardly recognize it.

But that's the job of a team of American maintenance men here—to strip down the big planes, take them apart, piece by piece, and then put them back together again like an oversize jigsaw puzzle.

The project is part of a costly effort by the nation's commercial airlines to keep their planes in top shape, not just in accord with federal regulations, but far beyond these standards.

As each plane flies in to American's maintenance base near the Tulsa Municipal airport, a cleaning crew scrubs it down, from radar nose to rudder, by hand. Airline people say this process is more economical than building a complex washing apparatus.

Then the plane is towed into the overhaul hanger and placed in a dock, ready for the five-day job of making it "more than ready" for the air again.

**Once A Year**  
The company's planes are brought to Tulsa about once a year, long before they really are in need of an overhaul. This is an example of the airlines' efforts to stay a few steps ahead in the safety game.

The tedious job of taking the plane apart usually begins on the "graveyard" shift at midnight Sunday. Separate groups of workers concentrate on certain parts of the plane—the airframe, the passenger cabin, the pilot's instrument panel.

The engine gets special treatment. Each plane is brought in several times a year for engine overhaul, because the engine usually needs much more care than the rest of the craft.

In the regular overhaul, the passenger cabin takes on a bizarre appearance. The seats are removed, one by one. Any tears in the upholstery are repaired and stains are removed.

The rugs come up, and the lighting and air conditioning mechanisms above each seat are taken apart. The maintenance base has its own upholstery and rug department.

**Stains**  
Cigarette-smoking passengers give the workers headaches. Nicotine stains cannot be cleaned off the overhead panels, which are made of vinyl, so the panels must be painted periodically to cover the stains.

The "buffet" area where the stewardesses prepare meals for passengers gets dirty easily, too. Probing into the cracks to wash out coffee stains is one of the hardest jobs in the cabin.

This same procedure of taking apart, inspecting, cleaning, repairing, replacing, is carried out throughout the plane.

**Dismantled**  
The engines are dismantled of the last bolt. Ignition and jet instrumentation harnesses are taken out and examined on an electronic test bench.

Airframe specialists use X-rays to test stresses, strains or possible weaknesses.

The overhaul records fill more than 1,000 pages. The work records are signed some 2,500 times during the five-day period by mechanics, inspectors, foremen and other supervisory personnel, as each phase of the job is completed.

Altogether, the big jet overhaul costs about \$50,000 for material and labor. It takes about 7,500 man-hours to do the work.

Lucian J. Hunt, a handsome ex-Navy pilot, heads the maintenance base, which American calls "a \$25 million health club." He has more than 4,000 people helping him.

**Library Has Space For Million Books**  
St. Louis — (UPI) — The new \$3.7 million John M. Olin library on the Washington university campus houses 400,000 books — but has enough space eventually for one million volumes.

The library is divided into smaller areas where students may browse among the bookshelves and study at nearby tables. The building contains 125 small study rooms for faculty members, 60 cubicles for use of graduate students and 10 seminar rooms.

**TINTED TIME**  
New York — (UPI) — A new fashion in women's watches has been developed by metallurgy experts at Bulova. The technique of alloying many colors of gold — from yellows, to pinks, to blues, to greens — has been adapted into a new series of multi-hued cases and bracelets for tiny timekeepers.



# COMEDY OF ERROR?



ANY SIMILARITY TO ACTUAL PERSONS MENTIONED HEREIN IS PURELY INTENTIONAL . . .  
MERCHANDISE GUARANTEED TO LIVE UP TO ITS DESCRIPTION . . . ON SALE 9:30 A.M. FRIDAY . . .

**HAL**

To say, to say . . . but only that I stand corrected for errors of my way . . . with infinite just I say Oh, wherefore art thou — sale, sale, sale! Oh George

## WASHINGTON'S BIRTHDAY SALE



**KATY**

Double, double toil and trouble, thrice cried the boss and he wept and wailed when he saw the loads of loot and a tigers tail, the ingredients of this bizarre sale!

### LINENS, YARDAGE, DOMESTICS

(HIDEOUS HOME HINTS) Horrible Hal haunts you!

- WE HAVE** one piece (10 yds.) Magenta (ugh) double knit fabric—Says "Ready for the needle"—it has been ever since Martha refused to buy it. Regular 7.98. Now 2.88
- I THINK** that I shall never see a piece of fabric quite like these—Orange Burnt or Orange Brown, it's the worst darn color in this whole town. Double knit, too! Reg. 3.98. Now 2.88
- NOW HEAR THIS**—Now hear this—Attention all you purple people—come in and drape yourself. We have 2 pieces of purple wool that just won't quit (oh, how I wish it would). Reg. 5.98. Now 2.88
- IT HURTS** me even to write it—"Magenta Silk Shantung", there I did it. The silk worm rolled over and dropped dead when he saw this one. Reg. 3.98. Now 1.88
- PINK LACE** should be good for something. George bought it for Martha but she returned it because it scratches. Do you have an itch for it. Reg. 1.39. Now 88¢
- EVEN THE "LADIES"** in the piece goods department say these are quite distasteful—I call them awful. My assistant bought this bandolier cotton and rayon slinging. Reg. 1.98. Now 88¢
- 2704 SQ. INCHES** of no iron table cloths. It says tumble dry but Martha couldn't tumble, so, we still have them. Reg. 3.98. Now 2.55
- WE SPECIAL ORDERED** one 12x15 ft. nylon rug for old Uncle George. The color came in an itchy Antique Goldfish, Greenish, you name it, color and when he saw it he said no, no, no, no, no, no! How about you? Reg. 115.00. Now 88.00

- VALANCING**—You know the stuff you frame your windows with. Somebody really framed me when they unloaded it on me. You can't take much of this at one time. Reg. 98¢ to 1.29 yd. Now 2¢
- 7 ONLY**, Valley Forge specials—floor pillows for sitting around the camp fire and all in passionate pink. Reg. 3.98. Now 88¢
- GEORGE WASHINGTON** almost slept here. When he saw this pair of twin bedspreads we had, he just turned green and ran for the door. They are just quilted grey and white. Reg. 10.98. Now, each 3.33
- ONE ONLY**—Dirty white bedspread, full size—this one has been around and around, and around, and around. Reg. 14.98. Now 9.88
- ONE PAIR ONLY**, Twin size dust ruffles. Cute—adorable and sweet. Only one problem here, one is lilac and one is blue. Reg. 4.98. Now 1.88
- 6 ONLY**, Plastic wheelbarrows—so if you want to shove any plastic around here is your chance. P.S. These are kiddy size. Each 10¢
- 1 ONLY**, 24" Boys two wheeled bike. Please bring the boy with you so we can measure him. Remember he can't be over 24" tall. Reg. 39.98. Now 26.36
- NOW IS YOUR CHANCE** to fry. I did on this. One only. Farber Stainless Steel Chicken Fryer. A real blast at this price. Reg. 15.50. Now 10.77

- AS LONG** as you are getting fried, let's do a real good job of it. We also have a Farber 12" (extra large) stainless steel fry pan. Reg. 13.50. A steal at 8.22
- WOMEN'S WOOL SKIRTS** . . . dark stripe, handed down from the dark ages to Martha's era. Regular 8.98. Now 3.00
- BIG ASSORTMENT DRESSES** . . . leftovers from Martha's first style show. They come in jr., misses and half sizes . . . no bustles or hoops to worry about. Value to 14.98. Now 2.22
- GROUP BETTER DRESSES** in assorted fabrics and sizes . . . just right for those unusual events such as dog fights, tarantula races, etc. Yours for 6.22
- WOMEN'S SWEATERS** . . . fine wool and fur blends. Cardigan and slip-ons that are without doubt the worst selection we ever had. I was ill the day I bought these. Values to 19.98. Now 3.00
- FULLY LINED CAPRIS** . . . neatly lined up for some unsuspecting soul to buy. Even if they are a famous make they still defy all laws of seamanship. If your eyes are good, take time to look them over. Values to 16.95. Now 6.22
- MATERNITY SKIRTS** . . . in obnoxious colors and styles. There are skirts, pants, tops. All shapely values. Regular to 5.98. Now 1.00

- BIG SPORTSWEAR GROUP** . . . skirts, pants, tops, swim suits. Webster has no definition for these at all. We are not smart enough to describe them. Values to 12.98. Now 1.00
- WIDE WALE CORD CAPRIS** . . . if only Martha had a chance at something like this. You'll never believe it until you see them. Egads! Was 7.98. Now 3.00
- WOMEN'S CORD AND WOOL SKIRTS** . . . any similarity to these and the latest fashions is accidental. The quality is there but the style . . . ugh! Values to 12.98. Now 3.00
- VALLEY FORGE RAIN WEAR CO.** is no longer in business and when you see these two rain coats you'll understand why. Ploof, reversibles, and taffeta lined. Values to 29.95. Now 13.00
- WOMEN'S COATS** . . . springy bright and oh, what a fright. They're nice, they're sad, they're gay, they're mad. Souffles, Pom Pom weaves, Spring fleeces, pastels, whites, blacks. Enough for the description as I can't make them any better than they are for 28.00
- UNDESCRIBABLE HATS** from our Millinery dept. These are really way out. A mixture of feathers, straw, cloth, fabric, weeds, drab dyes and we don't know what all. A conglomeration we'd rather sell than discuss. You are most welcome to inspect these masterpieces and judge for yourself. The results will be startling. Reg. to 10.95. Now 1.00 to 4.00

**ED**

A safe—a sale, my play boy key for a sale. I bury my mistakes oh customer . . . help me bear the pain — have compassion oh friend, buy, buy, buy!

### MEN'S and BOYS' (Haberdashers Headaches) Eager Ed awaits you!

- WE ARE** the not-too-proud owners of 8 men's half-work, half-dress jackets . . . to quality to wear one of these you must prove that you only half-work and half-dress. Reg. to 11.95. Now 4.76
- WHEN YOU TALK** about old bags, Mann's has 'em. 1 Only white 22 inch weekenders (for all people whose jobs permit a 22 inch weekend). Regular 12.95. Now 3.22
- VAL-A-PAK SUITCASE** . . . anyone who passes up the boys cotton flannel sportshirts is missing the best buy in town. 12-18. Reg. 1.98. Now 1.00
- NYLONS** . . . odd sizes for people with odd legs . . . if nothing else give 'em as gifts. Reg. to 1.65 pair. Now 19¢
- ANKLETS** . . . horrible hues of yellow, pink, brown and black. Suggested use: to plug up knot holes. Regular 39¢ pr. Now 5¢
- WOMEN'S SLEEPWEAR** . . . pajamas, long gowns, short gowns, cotton knits, flannel, brushed rayon and nylon. Ideal for grease rags. Values to 12.98. Now 1.99
- SLIPPERS** . . . for anyone feeling like doing the minut. Gay little things that I really slipped up on. Regular to 4.00. Now 2.99
- LITTLE GIRLS SLIPS** . . . these have slipped around from one counter to another for a long time. I ask you, don't little girls wear slips anymore? Reg. to 4.00. Now 2.99
- YOU'LL NEVER TOP THESE** caps for boys . . . buy these quickly . . . winter is only 10 months away. Regular 1.98. Now 46¢
- ANY LITTLE COWARDS** on the premises? Yellow knit shirts boys' size 12. Regular 2.95. Now 76¢
- WE'VE SWEAT** over these all we are going to . . . short sleeve sweatshirts for boys. Assorted colors and sizes. Originally 1.98, then 1.77, then 1.22, then 1.00 NOW. No lying. Now 66¢

### CHILDREN'S LINGERIE FOUNDATIONS (Delinquent Specials and figure fibs) the perils of Pat!

- BILLIOUS GREEN & ORANGE SWEATSHIRTS** for small boys. Suggest you keep small boy in backyard if he wears one of these. Reg. 1.79. Now 49¢
- GIRLS SPORTSWEAR** . . . and they have been such good sports to stick with us for so long. There are wool capris, sweaters, skirts. They're looking for a new home. Regular to 11.98. Now 1.99
- GIRLS COTTON ROBES** . . . in hideous colors, unapologetic and sickening. Regular 5.98. Now 2.99
- 4 ONLY DIAPER SETS** for boys. Papoose type deals that the Indians left on the doorsteps at Mt. Vernon. Regular 4.98. Now 2.49
- INFANTS 2-PC. SETS** . . . Helene's nylon. Flashy pink and pea green blue. Cute yes, but there is a limit! Regular 5.00. Now 2.99
- HOODED SWEATSHIRTS** . . . terry cloth. For infants and they have a gripper front. I was hood-winked into buying these. Regular 2.98. Now 1.49
- WOMEN! I ONLY MERRY WIDOW!** . . . No, not a dance or waltz and not a bug in just a real dud with us. (Foundations, 2nd floor). Regular 13.50. Now 4.99
- GIRDLES** . . . here you go gals. Cinch up to these values. Gather around and see what these can do for you. As for us, they don't do a thing. Regular to 7.95. Now 1.99

### SHOES FOR FRETTING FEET

- A BUNCH OF CHILDREN'S SHOES** that refuse to be sold. Odds and ends that keep getting in our way. Relieve the pressure please. Regular to 8.99 for 4.00
- REAL DUDS FOR MEN** . . . a group of black and brown loafers that have loafed around here about long enough. Out, they go. Regular to 10.99. Now 5.00
- BOYS' LOW TOP PLAY SHOES** . . . that's what they look like but would be better for school wear. They're not very good looking but are of good quality. Sizes 10 1/2 to 3. Now 5.00

**DORIS**

To do—oh what to do, out, out, oh long lived goods. Parting is such sweet sorrow. Out, out I say! By George.

### ACCESSORIES, GIFTS, NEGLECTED NOTIONS (Gobs of little mistakes) Delirious Doris does it again!

- FAVORITE FRAGRANCES** . . . famous names. Fascinating scents for fastidious females. Fresh from France, the fumes, not the females. Regular 3.50. Now p.t. 2.22
- WRITE! WRITE!** 6 only boxes of writing paper with envelopes. Dirty boxes filled with fresh clean white paper. Reg. 1.00 & 1.59. Now p.t. 3.22
- DRESS YARN** . . . 60 lovely skeins, at least we think they are lovely. Seems as if other people don't. You'll recognize the famous make. Regular 79¢. Skin. Now 44¢
- ASSORTED KNITTING KITS** . . . sweater kits, mittens or cap kits. Ladies' or child's. They just don't fit in with our new stocks. If the price is right, the size should be unimportant. Reg. 1.00 to 5.98. Now 2.22
- UGLY UNATTRACTIVE GIFTS** for those who appreciate the lesser things of life. Purple glass candy jars. Regular 2.49. Now 1.22
- HOPELESS PLASTIC DINNERWARE** . . . 2 only 5-pc. service set. Reg. 5.95. Now 2.22
- 3 only 20-pc. starter set** Reg. 12.95. Now 5.22
- WHITE & GOLD TRIM POTTERY** . . . styles in early American as seen at Mt. Vernon. Ash Trays, regular 7.50. Now 3.22
- Comports**, regular 13.50. Now 5.22
- Decanter**, regular 12.00. Now 4.22
- COSTUME JEWELRY** . . . who told me initial bracelets and necklaces were the fad? Maybe some are, but these pieces of metal were designed for Martha. Reg. 1.00. Now 9¢
- CRIPPLED CLARA** loved each little piece of costume jewelry in this selection . . . she dreams of them now with her foot propped high . . . hoping they disappear fast. She can't bear to look at them again. Our worst choice, reg. 3.00. Now 22¢
- Second Best Better Jewelry** p.t. 1/2 Price
- BLACK FABRIC HANDBAGS** for spring? Consult the fashion expert . . . we thought they looked fashionable, chic and charming. Nobody else did. To look is free, to buy—a challenge. Regular 11.98 and 13.98. Now 3.22



NO LAY-AYS, REFUNDS, EXCHANGES, PHONE CALLS . . . NO NUTHIN'—ONCE YOU GET THIS STUFF . . . YOU'RE STUCK WITH IT!