



Making history, breaking records

C-5 team pushes planes to war fighters faster

By **DAMIAN HOUSMAN**
damian.houseman@robins.af.mil

The Warner Robins Air Logistics Center made Air Force history Feb. 3 when a C-5B Galaxy aircraft left programmed depot maintenance after a record-low 159 days.

Aircraft 87040 left for Travis Air Force Base, Calif., breaking the previous maintenance record of 171 days here. Last year, the same process took 200-plus days.

The C-5 arrived at Robins Aug. 22, and maintenance crews immediately began preparing the aircraft for the task ahead.



U.S. Air Force photos by SUE SAPP

Top: A C-5B Galaxy taxis onto Robins' runway on its way to Travis Air Force Base.

Above: Gail Turner, scheduler, and Elizabeth Foster, chief of C-5 supply chain management, watch as the aircraft taxis onto the runway.

"This aircraft represents a total team effort," said Christine Ellis, whose metal bond team worked on the C-5. "Our team fixes metal panels in place, reducing the number of panels that have to come off for repair. Communication and team integrity are vital, since we share equipment, time and space," added Ms. Ellis.

Functional Test ran the engines, trimmed them, and made the aircraft safe for flight. Once they completed their work, including a preflight inspection, 339th Flight Test Squadron pilots took it up for a check flight. Discrepancies discovered during the flight were fixed. Then the paint shop did touch up, and the aircraft was released. Roy Rudd, C-5 functional test team leader said the process, which normally takes 10 days, was completed in five.

"The C-5 is a challenge because of its size," he said. "This time, we had the advantage of Concerto. Concerto is project management software which gives a visual depiction of the aircraft, tasks and status. The lists of tasks are color coded as to urgency, alerting us to the most important things to do."

Critical Chain Project Management is a management tool which analyzes processes, and allows for using resources in the

BY THE NUMBERS

C-5 flow days have steadily declined for both the C-5A and C-5B, according to the 402nd Maintenance Wing. Both models are seeing record-low flow days.

►C-5As took 391 flow days in 2001, 262 in 2004, and 247 last year.

►C-5Bs took 218 flow days in 2001, and an average of 212 flow days in 2004 and 2005.

most expeditious way possible. The adoption of CCPM has allowed further reduction in flow days.

"We had a Lean event about three years ago, but we still didn't meet our schedule," said Duane Price, C-5 side engine cowling shop supervisor. Normally, engine cowlings are sent to his shop for repair, and rebuilt.

► see C-5, 2A

C-5

Continued from 1A

"About a third of the cowling is a bonded item, and not repaired by us," he said. "Getting those items back in time was a problem."

Last March another Lean event was held, and this time it was found to be easier to manufacture than repair those items.

"Now we know we will have all the parts here when we need them," said Mr. Price. "We pushed back the layers of the repair process and created something we can measure against."

The shop now produces 22 cowlings per month, and has greatly reduced back orders. The changes happened just in time to have an impact on aircraft 87040.

"It's not just management techniques and computers that get the job done, it's those Middle Georgia war fighters," said David Mann, C-5 Production Section chief. "It's the people. They get the job done, and they deserve all



Roy Rudd

the credit."

According to Mr. Mann, the 160-day flow rate will be maintained for both C-5A and C-5B aircraft, despite the older A-model requiring 52,000 man-hours for completion, compared to the 34,000 man-hours needed for the C-5B.

The B-model was produced in the 1980s.

Maintaining this accelerated pace, according to Mr. Mann, rests on a combination of CCPM



David Mann

and Lean.

"We have reduced our work in progress from 12 to seven jets, which allows us to use the same number of technicians to work fewer C-5s simultaneously," Mann said. CCPM and Lean have provided us the tools to work more efficiently and increase our flexibility in completing projects."

Another C-5, an A-model, will leave Robins in the near future.



Christine Ellis