

er Revival

IWM Duxford is conserving Boeing B-17G 'Mary Alice' for future generations. **Steve Beebee** got a progress report



The cockpit required little work other than cleaning.

"Conservation is done to preserve an object for as long as possible with the minimum intervention"

Grounded in 1972, it arrived at Duxford in May 1975 together with an airworthy B-17G, now named *Sally B*. Initially seen as a source of spares for the latter, it was restored as *Mary Alice* in 1978.

proved fortunate as the removal of the two central wing sections from the American Air Museum turned out to be especially challenging.

"They're larger and heavier than they look and they fought us all the way," says Chris. "Working in a confined space within a public area meant that everything took longer than anticipated. My priority was to ensure that nobody got hurt, so we didn't take any chances."

"We had to take the flap shrouds off because we had limited height, and of course we also only had limited width - the width of the door frame. The guys got the central wing sections up onto the leading edges but the trouble is that with the undercarriage legs still in there, the centre of gravity is a nightmare to contend with. You've only got to move each section a little bit and the centre of gravity shifts dramatically."

With the help of a specially constructed frame, and local crane specialists Welch's Crane Hire, the sections eventually made a successful exit. Although the crane didn't take any weight, it was there as a safety measure.

"When we had the problem with

the fuselage, they had a crane operator here within 15 minutes to advise me, and the machinery required within 30 minutes. They know what they're doing with jobs like this, and I have no qualms about using external expertise and skills when required."

Many hands

Four full-time Conservation staff are working on the project, along with 50 to 60 volunteers. The latter may be available for anything from half a day on a Sunday, to four days a week in the case of one hardy soul. Planning the use of volunteer labour is difficult but the skill set and manpower such a vast workforce can provide is priceless.

One of Chris's jobs is to protect them from diversions, as the museum intends to stick to its 16-month schedule rigorously. Everything from visiting film crews to interested members of the public have the potential to delay work.

"Visitors are naturally curious about what we're doing, and really we're here for the public, so if they want to talk to the guys, they're nearly always happy to respond.

Thankfully no one seems to be objecting to what we're doing, although we've lost count of the number of times we've been asked if it's going to fly again!"

At present, the work remains on schedule. A short delay before the aircraft goes into the spray area has been agreed to allow the Vampire to be finished. Although the B-17 is the higher priority project, other matters can be addressed while the jet is being repainted.

Inside and out

"Following the paint strip, we've concentrated on chemically treating the corrosion," says Chris. "It may not look much different but what you're seeing is shadow rather than corrosion. In some areas, though not too many, we've had to physically remove corrosion and de-rivet the fairing at the top of the fuselage to carry out similar work - and that's going back on now."

The team is also putting the airframe through an alochroming process - a procedure to treat bare metal before paint is applied - and it is now almost ready to go into the spray area for primer. ➔



'Mary Alice' (nearest camera) at Duxford with 'Sally B'.