



## AFTER THE BATTLE

WAR FILM

# THE REMAKING OF MEMPHIS BELLE

The motion picture industry often undertakes 'remakes' of a film story, but rarely is a documentary recast as fiction. Warner's new epic about Second World War airmen, *Memphis Belle*, is based on the factual film of the same name that followed the crew members of a Fortress bomber on their last combat mission. Hollywood's renowned William Wyler made this documentary and the idea for the fictional movie originated with his daughter Catherine, who is its co-producer with David Puttnam.

William Wyler made a number of Hollywood successes and was at work on *Mrs Miniver*, the fictional story of a British war wife, when the United States became involved in hostilities in December 1941. Thereafter, he was recruited by the US Army Pictorial Service, which was set up — among other things — to make instructional and publicity films. Through friends from the movie industry who were serving at USAAF HQ in Washington, he met some of the commanding generals and interested them in his ideas for filming with operational units to provide material for training purposes. The USAAF was then in the process of building a very large force of bombers with the aim of conducting a strategic offensive against Nazi Germany. The capital expenditure on aircraft, equipment and training was prodigious and frowned upon in some military and government quarters. The US Navy in particular, saw this as an obstacle to its own funding and was also sceptical of the USAAF's programme and objectives. To counter adverse comment at a crucial time, USAAF HQ favoured a documentary film of its bomber operations and in the autumn of 1942 Wyler, then a major, was sent to the United Kingdom with this assignment.



By Roger Freeman

**Top:** Major William Wyler with the crew of *Bad Penny*, one of the aircraft belonging to the 91st Bomb Group of the Eighth Air Force during the filming of *Memphis Belle* in 1943. **Above:** In 1989 his daughter Catherine followed her late father's footsteps to England to remake the film which is considered one of the Second World War's finest documentaries.



In the spring of 1943 several crews were nearing the 25 missions which was to be recognised as the yardstick for the fulfilment of a tour of duty. At Bassingbourn, the most convenient station to London where Wyler had chosen to base his movie, there were at least two aircraft in the running, *Delta Rebel 2* and the *Memphis Belle*, a B-17F serial 41-24485 of the 324th Bomb Squadron (coded DF☆A). In the event, *Hell's Angels* of the 303rd Group at Molesworth was recognised by the Eighth Air Force at the time to have completed her tour first but, for the purposes of the film and subsequent publicity tour to be run in the United States, the honour was bestowed upon the *Memphis Belle* on the successful completion of her 25th sortie — to Lorient — on Monday, May 17. (Post-war research now reveals that the 25th mission took place on May 19 to Keil.) *Right*: Three weeks later Captain Robert Morgan and his crew were given an official send-off by General Jacob Devers, Commander USAAF European Theater of Operations, and General Ira Eaker (right), Commanding General of the Eighth Air Force.

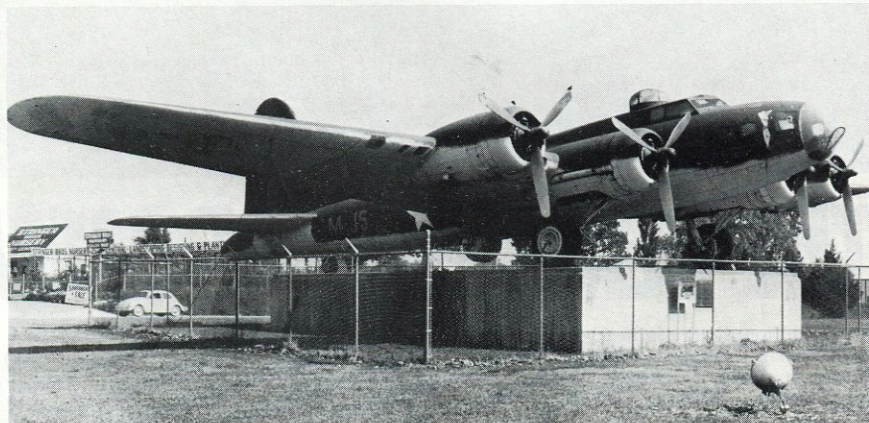


At Eighth Air Force and its Bomber Command in England, Wyler found two acquaintances from Hollywood days, Sy Bartlett and Beirne Lay, both screenplay writers and now officers involved in public relations. With their help Wyler began to develop ideas and undertook gunnery training so that he would be permitted to fly on daylight bomber missions. Colour stock was to be used at a date when colour was very much more the exception than the rule, although its use dictated good filming conditions in view of the limitations of camera lenses at that time. The chief location airfield selected was Bassingbourn, near Royston, primarily because it was the most accessible from London. The resident unit was the 91st Bomb Group and Wyler and his cameramen flew with them on several occasions to obtain combat footage. The dangers involved were soon obvious and in the course of these flights a cameraman was lost in a shot down B-17. At the time only one in three of the 91st's combat personnel had a chance of surviving his assigned tour of 25 missions.

Eventually a story-line was developed around an individual Fortress crew. Unfortunately, when filming was in an advanced state this particular crew was missing in action. Attention then turned to Captain

Robert K. Morgan's crew and the *Memphis Belle*, their 'regular ship' which was named after Morgan's girlfriend. It appeared that

the *Memphis Belle* and the Morgan crew were likely candidates for becoming the first in VIII Bomber Command to complete 25



The *Memphis Belle* remained Stateside for the remainder of the war on training duties in Florida, and was purchased by the city of Memphis for \$350 in March 1946. However no proper provision had been made to house what was now undoubtedly America's most famous B-17 and the Fortress was destined to moulder away in the open air at the local National Guard Armory for nearly 30 years (above).



By the 1970s the 'Belle' was in a sorry state, both externally and inside where virtually every moveable item had been plundered by souvenir hunters. It was only after the Memphis Belle Memorial Association was formed in April 1976 that any positive action was begun to save the aircraft. Restoration began in 1979, but it was not until 1987 that the 'Belle' was ready for her last move to a purpose-built display dome at Mud Island. *Right*: The real belle, after whom the aircraft had originally been named, was Captain Bob's wartime girlfriend, Miss Margaret Polk.







missions. Individuals who reached this number and completed their tour were to be returned to the USA or given non-combat duties in England. It transpired that *Memphis Belle* was not the first Fortress in the Eighth Air Force to survive 25 missions but by that time Wyler had persuaded Eighth Air Force's commanding officer, Major General Ira Eaker, of the publicity value if *Memphis Belle* and Morgan's men, having reached the magic 25, be the first bomber and crew with that distinction to be returned to the United States together.

Wyler then centred his story-line around the *Memphis Belle* and crew on this last mission. He wrote the basic script himself on return to the United States, where some six months were spent on assembling and editing, although the film suffered further delay and was not released until April 1944.

The resulting 38-minute feature was acclaimed as outstanding. Despite having to work with much poor quality colour footage, the production skilfully conveyed the facts of the daylight bombing campaign within the medium of high drama. While, inevitably, an element of propaganda was involved, the flag-waving stance, so common in most wartime documentaries, was avoided in *Memphis Belle*. The film was undoubtedly one of the best, if not *the* best, of factual wartime films about US air operations.

After the war Wyler returned to Hollywood to make many more successful movies such as *The Best Years of Our Lives*. However, the experience with the early Eighth Air Force bomber crews remained for him one of the most memorable periods and one of which he never tired of reminiscing with friends and colleagues who were also 'over there'.

Daughter Catherine eventually went into television administration and production, first with Warner Brothers and then for the US Public Broadcasting Service. In 1986 David Puttnam, the new head of Columbia Pictures, recruited Catherine as his senior vice-president of production, responsible for developing non-fiction properties for feature films. In her new rôle, one of the suggestions put to David Puttnam was a film about the Eighth Air Force bomber crews, citing the *Memphis Belle* documentary. Puttnam asked for a screening and, greatly impressed, asked Catherine to explore the possibilities of a full length movie with a similar theme.



In the specially-prepared booklet produced in July 1943 to tell the story of the *Memphis Belle* to aircrew then under training in the States, Captain Morgan (rear right) emphasised the importance of teamwork. 'We had 10 men working together, each ready and able to help out anybody else who might need him.' His team in this particular picture were, L-R rear: Technical Sergeants Robert Hanson, radio operator, and Harold Loch, engineer and top turret gunner; Captains Vincent Evans, bombardier; Charles Leighton, navigator, and James Verinis, co-pilot. Front: Staff Sergeants Cecil Scott, ball turret gunner; Clarence Winchell, waist gunner; John Quinlan, tail gunner; and Casimer Nastal, waist gunner.

The first task was to ascertain the availability of B-17 Fortress aircraft. Catherine Wyler knew there were a few maintained in flying condition by enthusiasts because her uncle, restaurateur David Tallichet, owned one. Through Tallichet she found that at least eight B-17s were currently airworthy in the United States. Further, she discovered that the original *Memphis Belle*, which had

been acquired and preserved by the city of Memphis, Tennessee, at the end of the war, had recently been refurbished and relocated in a permanent exhibition hall on Mud Island, Memphis. Dedication was planned for the spring of 1987 and Catherine attended this function where she talked to B-17 owners and veterans, all of which convinced her that the project was viable.

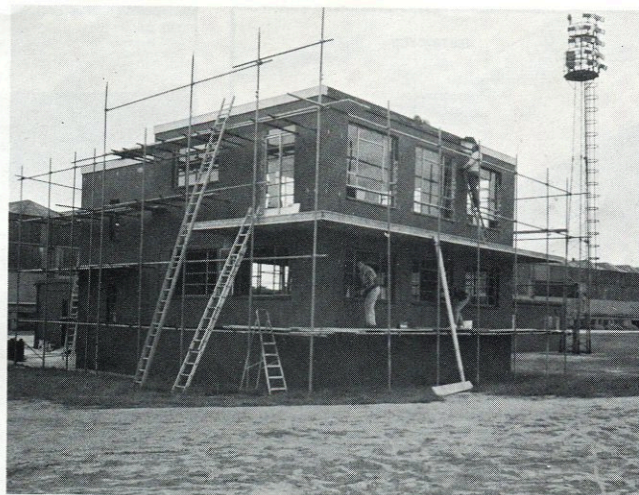


Catherine Wyler's team for the remake: L-R rear: Matthew Modine, pilot, who plays Dennis; Daniel Sweeney, navigator (Phil); Tate Donovan, co-pilot (Luke); Billy Zane, bombardier (Val) and Harry Connick Jr, the tail gunner (Clay). Front: Eric Stoltz, radio operator (Danny); Reed Diamond, engineer (Virge); Sean Astin, ball turret gunner (Rascal), and waist gunners Neil Giuntoli (Jack) and Courtney Gains (Eugene).





With twice as many B-17s airworthy in the United States than in Europe, it was obviously more sensible to make the film in America. However, because no airfield location could be found to simulate an East Anglian aerodrome of the period, and because some B-17 owners in the States were less than enthusiastic at the terms offered, it was decided to switch production to Britain. Even so, Production Designer, Stuart Craig, looked at several airfields before selecting Binbrook in Lincolnshire, recently vacated by the RAF. Certain fixtures and fittings of the post-war period like the control tower *left* had to

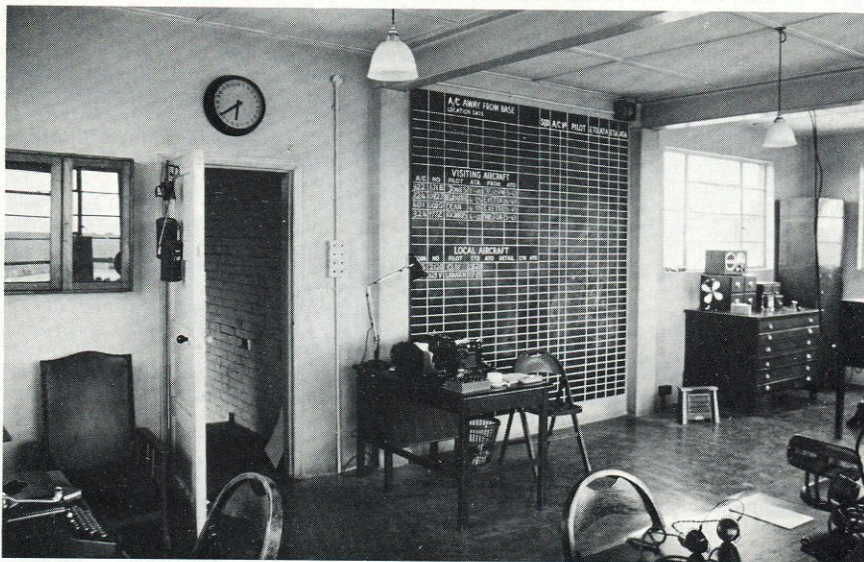


be hidden or, like the lighting towers *right*, dismantled. Then a new wartime-style control tower was built on the edge of the apron. Stuart decided that even at a cost of £32,000 it would be more practical to build it of brick rather than the wood and plaster of normal film sets. Alan Tomkins, the Art Director, recounts a humorous moment during its construction when he had to tell the local builder that for a wartime building he was making too good a job of the bricklaying. Alan reckons the story will be recounted by the brickie in many a pub of how, for the first time in his life, he was paid good money to do a bad job!

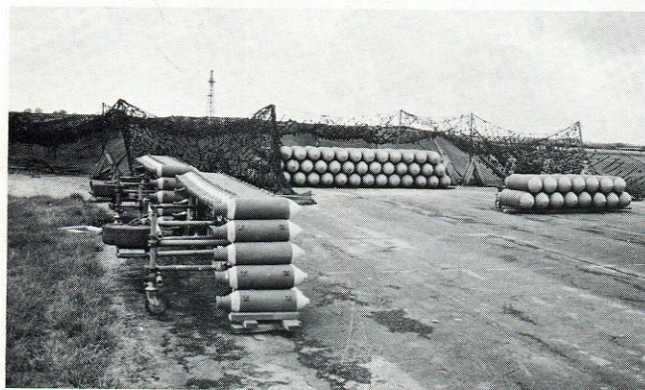
Puttnam's stint with Columbia, part of Coca Cola's empire, was short-lived and during 1987 he returned to Britain to regenerate his own company, Enigma Films. The *Memphis Belle* idea was not forsaken and Puttnam proposed that Enigma take on this project and that Catherine Wyler join him as co-producer.

The next step was a script, and for this the producers chose Monte Merrick, a young US playwright whose screenplay for *Staying Together* had been widely acclaimed. The resulting script was to be subjected to a number of re-writes through Catherine Wyler's determination to make it both historically and technically accurate. It is to Monte Merrick's credit that he endured the fault-finding of various authorities on the subject and made numerous changes which elevated his original draft from the questionable to the highly credible while still sustaining its dramatic qualities.

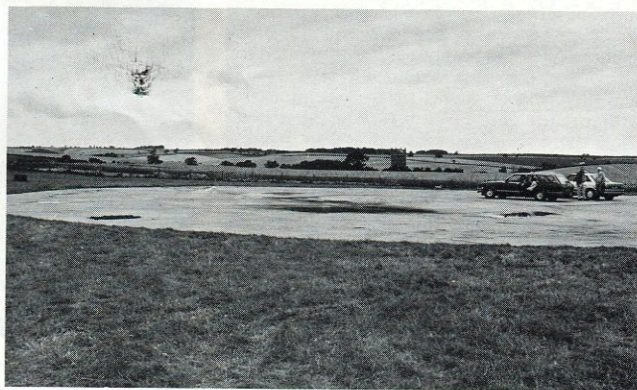
The question of where the film was to be made, the USA or UK, was primarily dictated by the availability of vintage aircraft. With at least eight airworthy B-17s in the States, the first proposal was to film the aerial and airfield sequences there and the studio scenes in England. Puttnam asked his associates, Eric Rattray and Stuart Craig, to go to the States to secure the services of the various B-17 operators and to search for



One of the tasks of the Art Director and his staff is to construct the finished sets while the Set Dresser, in this case Ian Gill, has to provide the authentic 'dressing'. When one entered flying control in the newly-constructed tower (note dodgy brickwork through the door!), one was transported back in time. Everything was authentic — right down to the polished lino.



Out on the airfield proper, bomb dumps appeared (*left*) and a frying pan hardstanding (*right*) was laid down near the perimeter fence so that early scenes of the *Memphis Belle's*



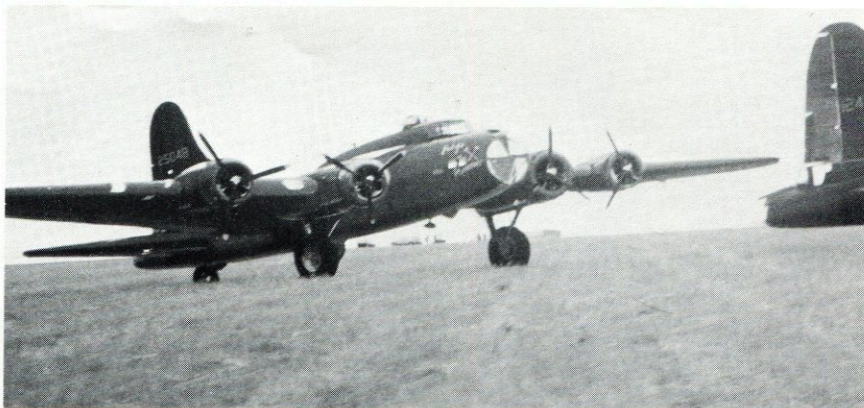
crew talking over the fence to farm workers could be shot. Note the church (two-sided) which provided a link with the real Little Stukeley church of the Wyler picture.



suitable airfield locations. Stuart Craig started in New England and moved down as far as Louisiana looking at airfields that could suitably represent a piece of England, but nothing was really satisfactory. When it came to interesting the B-17 owners in the project, several were not willing to accept the fees offered. Meanwhile investigation of the three B-17s flying in Europe brought more favourable responses and it was then decided to carry out all filming in the UK if some of the US operators would be prepared to fly their aircraft across the Atlantic. Initially three accepted and although one later withdrew, a firm commitment from David Tallichet and Bob Richardson to bring their Fortresses to England finally decided the location question. David Tallichet, himself a wartime B-17 co-pilot with the 100th Bomb Group at Thorpe Abbots, Norfolk, is said to have been finally persuaded by his niece offering to give his B-17 the starring rôle as *Memphis Belle*. The rotund Bob Richardson, sadly now deceased, had the oldest B-17 still flying. Both men were no strangers to movie and TV work with their aircraft, Richardson's having featured in *Tora, Tora, Tora*, a movie about the Japanese attack on Pearl Harbor. For the location work he had to fly from the west coast of America to Hawaii, so was no stranger to long over-water flights.

The major hurdle negotiated, David Puttnam now brought together the rest of his production staff, all highly experienced and several with international credits, this gathering being known in the British film industry as the 'A Team'. The amiable Eric Rattray shouldered the task of Associate Producer, which was the title bestowed on the individual entrusted with the day-to-day production problems and responsible for juggling the finances. A colleague described him as the front line general. In an industry where vanity and affectation are hallmarks, the *Memphis Belle* production personnel were all surprisingly pleasant and approachable people. This was particularly so in the case of Stuart Craig who, as Production Designer, had the job of finding locations and deciding on sets; in other words his responsibility was arranging the film backgrounds in which the actors would operate. Oscar awards for *Gandhi* and *Dangerous Liaisons* are proof of his expertise in this respect.

Stuart Craig's first task on returning from the US was to seek out a suitable airfield for location work. He had already had a look at Basingbourn, the wartime home of the real *Memphis Belle*, but this was now an army barracks and security alone would have ruled out its use, besides which most of the runways had been removed. Enquiries to find a remote, deserted, but intact Second World War airfield took him next to Predanack in Cornwall, only to find that the surrounding countryside could in no way be reconciled with East Anglia. While in the area, someone suggested he take a look at St



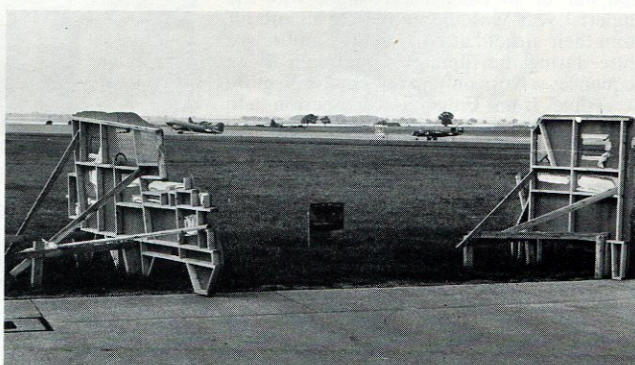
While the five B-17s — two from the States, two from France and one from the UK — were being prepared, Brian Bishop, the Scenic Artist, was preparing a few of his own! Brian's forte is to use reflected light on shiny surfaces to enhance the 3D effect of what is in reality a flat painting and, when viewed at a distance from the correct angle, who could tell the difference?



Eval. Here he encountered an RAF guard who, on learning Stuart's quest, remarked that Binbrook in Lincolnshire, where he had previously been stationed, was now on a care and maintenance basis and might be just what was wanted. A quick visit to Binbrook convinced Stuart Craig that this was near to ideal for Enigma's purposes. The surrounding countryside was devoid of modern developments and not unlike the rolling land in the south-west of East Anglia. The C-type hangars were like those at Basingbourn and on the technical site several wartime Nissen huts remained in good condition. A modern control tower, lighting masts and a few other post-war structures were the only alien features and could be satisfactorily dealt with.

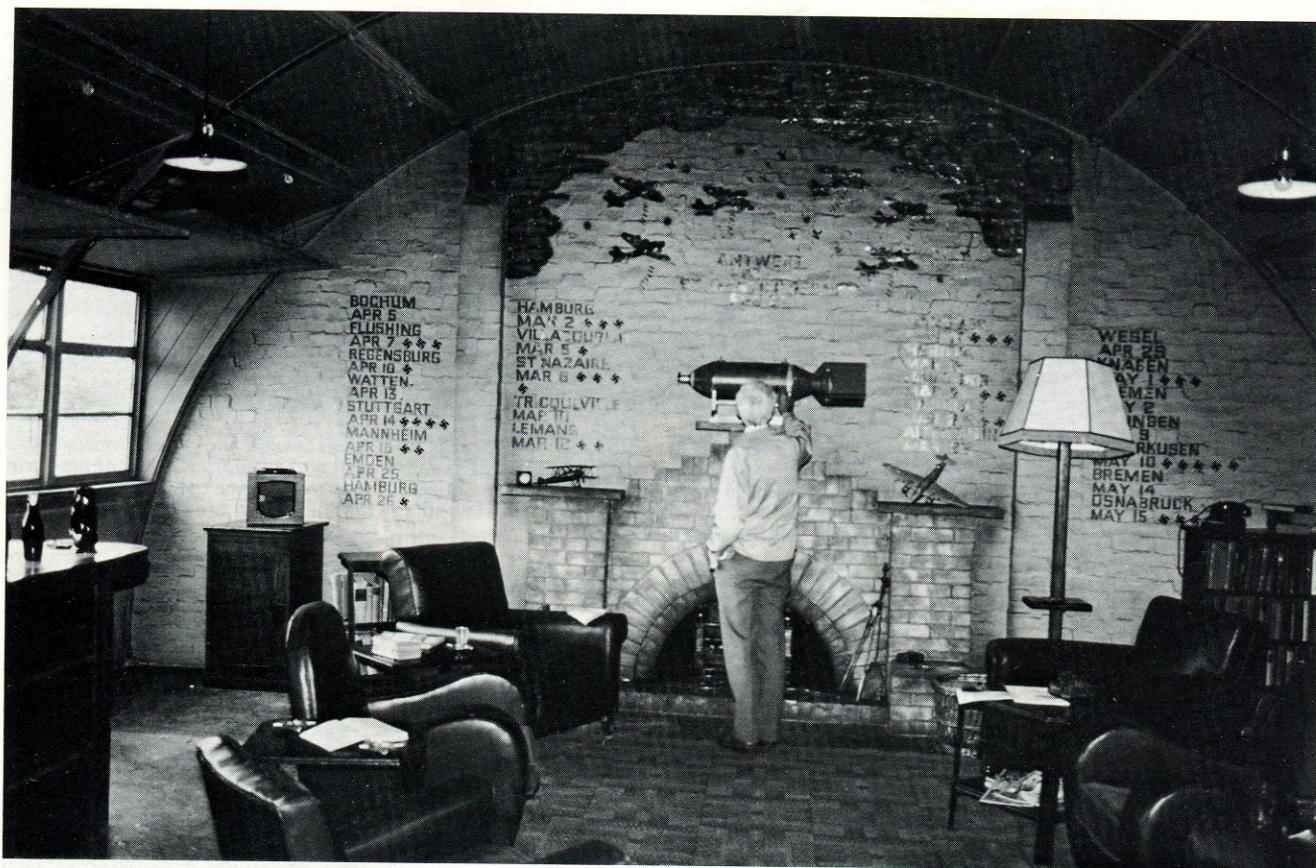
The Ministry of Defence agreed to Enigma's tenure and work was quickly put in hand during the spring of 1989 to carry out the necessary changes to Binbrook's landscape. The modern control tower was still RAF-manned for occasional touch-and-go visits by Tornados and could not be disman-

tled. Instead, it was hidden from camera angles by fake wartime-style buildings. A standard control tower of the period was then built in front of the hangar line. Much to the incredulity of the local builder's foreman overseeing this task, it was substantially built in brick like the real WWII towers, although it was to be demolished as soon as filming was completed. However, the interior ground floor of the building, which would not appear in shots, was not completed. The first storey watch room was to be used in the film and the interior was eventually fitted out with authentic equipment. Permission was obtained to take down the large lighting masts and the odd small modern buildings around the airfield were masked by placing period vehicles or mock-up aircraft in front of them. On the north side of the airfield a cluster of loop hardstandings was selected for parking the B-17s during ground scenes, and an additional concrete standing was added to the far end in the form of a circular pan.



The 60-odd authentic vehicles assembled at Binbrook were also augmented by more displays of Brian's handiwork.





Binbrook was originally built as a grass-surfaced airfield and was under construction at the outbreak of war in 1939. When completed it was first occupied by the remnants of the Battle squadrons, Nos. 12 and 142, which had been part of the RAF contingent in France before Dunkirk. Limited operations began in the summer of 1940 and both squadrons later converted to Wellingtons. In the autumn of 1942 the airfield became non-operational while concrete runways were laid. When this work was completed in the following spring, No. 460 Squadron, an RAAF-manned unit, moved in and remained until the cessation of hostilities. No. 460 was for much of the time a three-flight squadron with a nominal complement of 36 Lancasters. This enabled it to fly more Lancaster sorties than any other squadron in Bomber Command and it is also believed to have delivered the largest tonnage of bombs — some 24,000. Attrition matched the effort and over 100 aircraft were missing on operations from Binbrook. After the war Lincoln and Canberra equipped squadrons used the station and the last RAF occupants were Nos. 5 and 11 Squadrons equipped with Lightnings for air defence.

While Binbrook would be the main location site, arrangements were made with the Imperial War Museum to operate all aircraft from their airfield at Duxford in Cambridgeshire during the filming of the main flying sequences. Not only was Duxford more accessible from Enigma's Shepperton and Pinewood bases, it also had the required engineering and refuelling facilities that were essential in keeping 45-year old aircraft flying.

In addition to the B-17s the script called for enemy and Allied fighter types. The Luftwaffe could only be represented by the Spanish-built version of the Messerschmitt Bf 109, the Hispano Buchon, three of which were available. The Allied escort fighters posed more difficulty. The *Memphis Belle* story-line was linked to the spring of 1943 when escort fighters were US P-47 Thunderbolts or RAF Spitfires. As only a single P-47

Our author, Roger Freeman, examines the interior of one of the genuine Nissen huts at Binbrook converted by the Art Department into a mess, dining hall and briefing room. A lifetime's study and research, with many publications to his credit including his *Mighty Eighth* trilogy, has put Roger in a class of his own as far as the Eighth Air Force is concerned, and he was appointed Technical Adviser at an early stage. The design for the end wall was based on the officers' mess of the 381st Bomb Group at Ridgewell, although the dates and some of the targets were altered in keeping with the film's time span of spring 1943. Mission target listings were a common feature of interior decor at most bomber bases.

was flying in the UK, this type was ruled out. Spitfires were available in numbers but were not acceptable to the production committee because 'the viewing public associates Spitfires with the Battle of Britain'. A total of nine airworthy P-51 Mustangs were operating in Europe and the decision was made to have this type, even though its use was alien

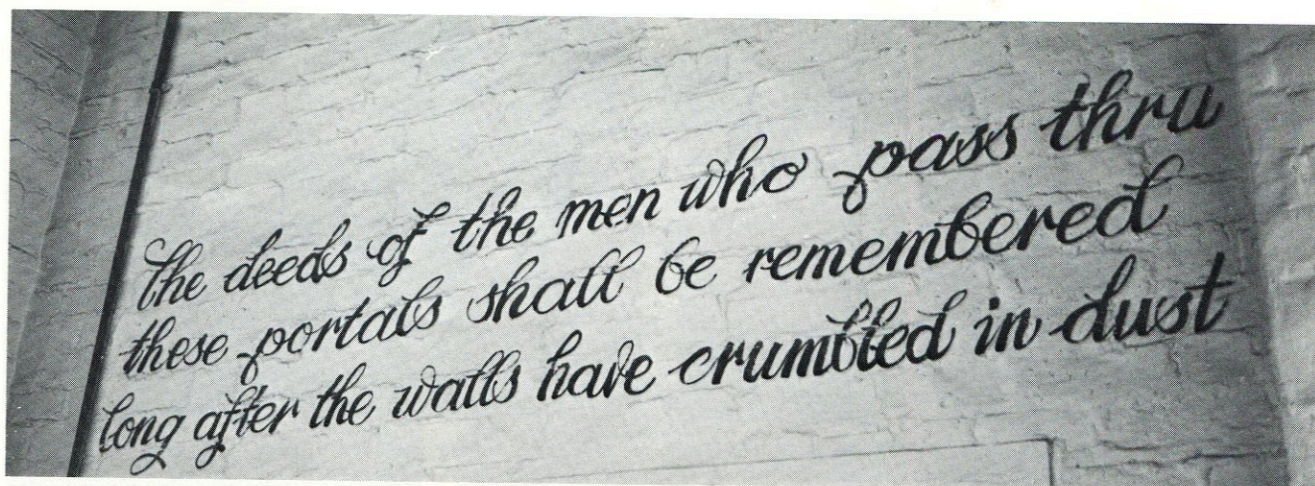
to the timeframe in which the story is set. P-51 escort fighters did not come into operational service in the United Kingdom until the end of 1943, and the actual models available, late P-51Ds, until early in 1945. (Their use intermingled with 109s in the early attack scene may also be somewhat confusing.)

This illustrates an occasion when dramatic



The scene where the crew are interviewed for *Life* magazine.





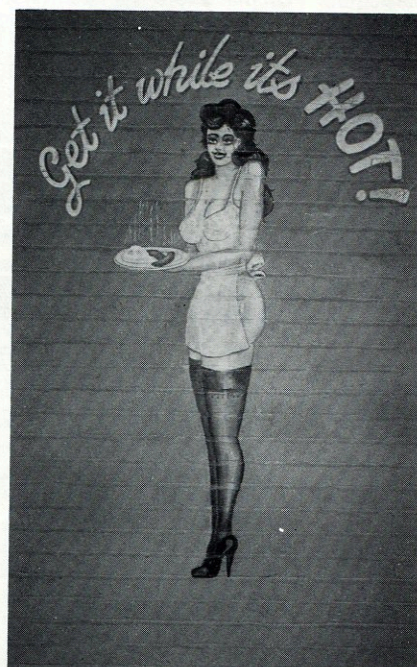
*Above:* Nice touch over the doorway of the briefing room — it was based on an original inscription at 390th Bomb Group at Framlingham. The artist for all the artwork — like the canteen lady (right) and the nose art on the aircraft — was the Graphics Designer, Robert Walker. Originally it had been intended to use stick-on illustrations for the B-17s which could be quickly changed, but the difficulty of attaching a flat print securely to the curved nose so that the slipstream would not tear it off led to the painting of all artwork direct. So expert did he become that, if pushed, Robert could do a woman in less than an hour!

appeal had precedence over authenticity. To the purist such actions are unforgivable, particularly when elsewhere so much care has been lavished on the production to ensure historical accuracy. In this case the decision was not motivated by the oft-given film industry view 'the vast majority of movie goers will never know, let alone care', but rather by the salient rule never to spoil dramatic effect by confusing the audience. There were to be other occasions when authenticity was surrendered to the cause of drama, albeit few.

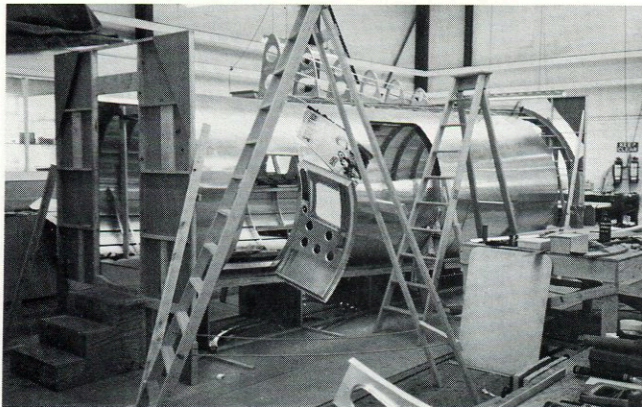
Puttnam and Wyler had, as somebody put it, 'wall-to-wall covering in experts and advisers' but, in the final analysis, the producer's and director's decision was paramount.

With some two-thirds of the screenplay set in the bomber itself, Stuart Craig's next quest was a B-17 fuselage that could be used for studio work at Pinewood. Despite extensive enquiries, world-wide, no such separate fuselage could be located. There was no option but to construct a complete mock-up interior using the studio craftsmen headed by Bill Welch. It was the Art Department's job to transfer the complicated Boeing drawings sent over on microfilm from the Boeing archives into readable drawings for the film technicians. These microfilms were combined with detailed measurements taken from Duxford's *Mary Alice* which has been virtually put back to its 1943 layout. *Mary Alice's* interior proved a great help in the early days in viewing a complete interior

Alan Tomkins, left, with Roger in the briefing room. The map is made up of coloured photo-prints of authentic maps of the period. One showing the actual Flak areas in 1943 was copied from an original in the museum at Basingstoke.



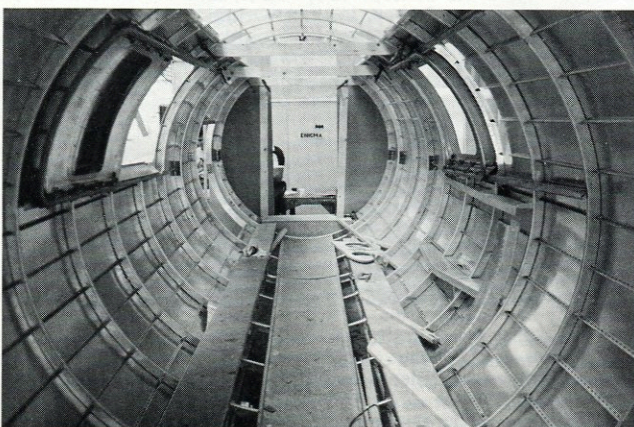
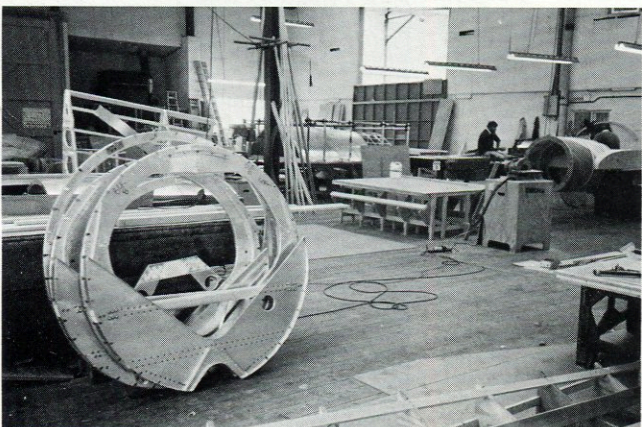




The Construction Department, under its manager Bill Welch, was the largest department on *Memphis Belle* with over 40 carpenters, 12 plasterers, 12 painters, 10 riggers and 10 stagehands. The department's crowning glory was the building of a full-size replica of a B-17 fuselage to be used for close-ups



of the crew inside the aircraft. Not only was its accuracy correct, right down to the last rivet, it was also made to come apart in six different places to facilitate various camera angles, etc. Here the sections take shape at Pinewood where the interiors were filmed.



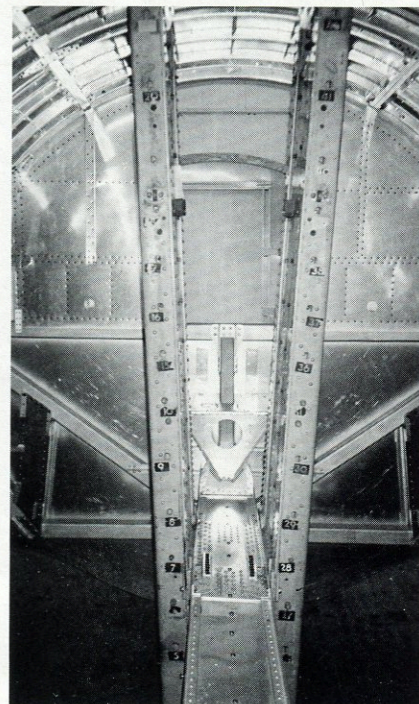
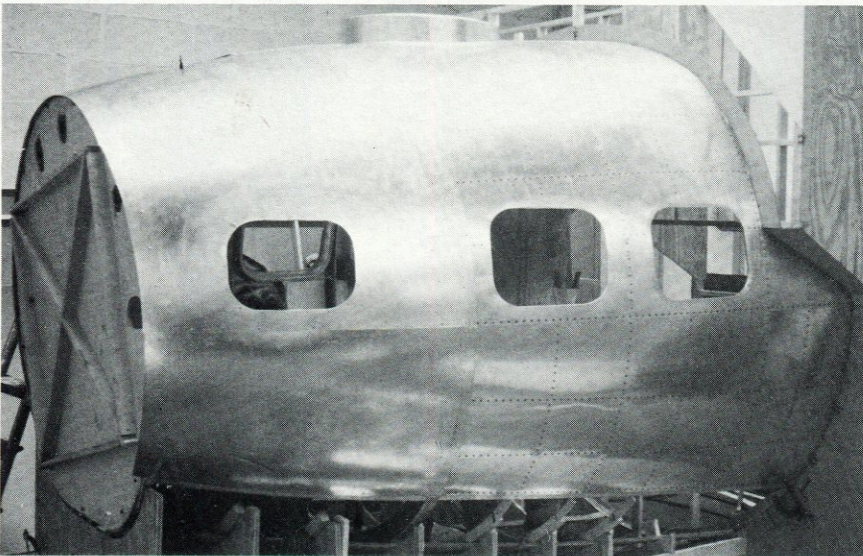
whilst Bruce Orris was combing the States for the equipment to dress the mock-up. Everything from control columns to bomb racks, radios to rear guns, were on his shopping list. The mock-up fuselage was made so that it would break down into six sections, so that close-up filming in the nose, flight deck and aft area was possible.

There were also a great many pieces of

authentic equipment of WW2 vintage that had to be acquired for the airfield sets and building interior sets, ranging from flare pistols to wall posters. Probably the most difficult to locate was the appropriate parachute harness and later types had to be used to meet all requirements.

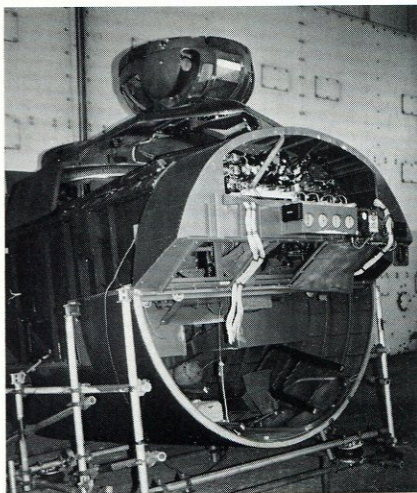
Meanwhile, what had started out as *Memphis Belle* had become *Southern Belle* then

reverted to *Memphis Belle*. As with the original documentary, the movie story-line follows the 25th and final mission of the ten-man crew of a B-17 who are scheduled to be the first crew to return to the US with their aircraft for a publicity tour. Elsewhere in the plot most is fancy, with fictitious crew members and engineered drama. As there was only a tenuous link with real people and

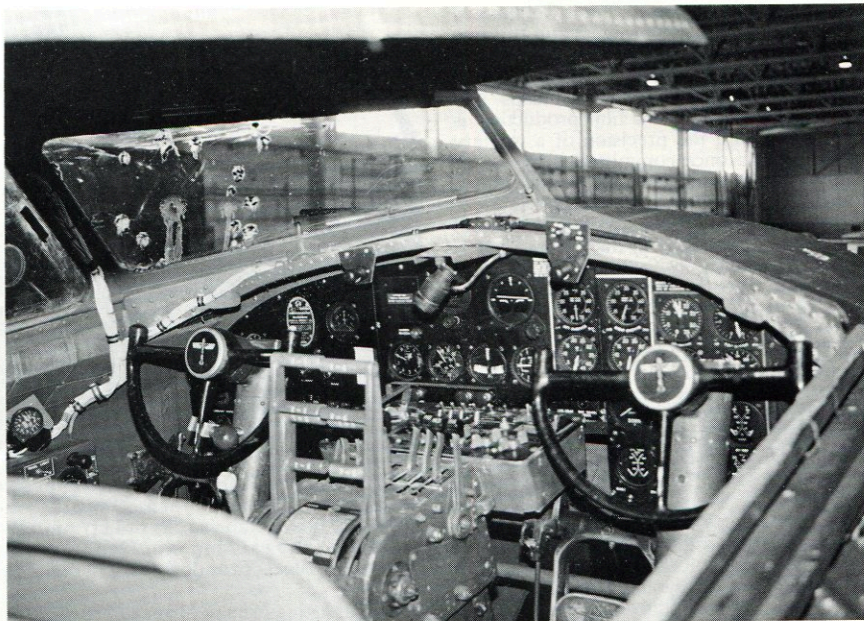


Above: The nose section was farmed out to the Mo Gomme company at Weybridge which specialises in the construction of racing car body shells, and whose craftsmen are expert in fabricating in metal. Right: Where possible, original B-17 equipment was installed. This section of bomb rack was obtained in the States by Bruce Orris. The final cost of the mock-up was £420,000 — more or less the same price in 1990 money as a fully-fitted wartime B-17!





From conception to completion the mock-up took 12 weeks to build. At the time of writing (June 1990) it is on public display in the Warner Bros studio in Brisbane, Australia.



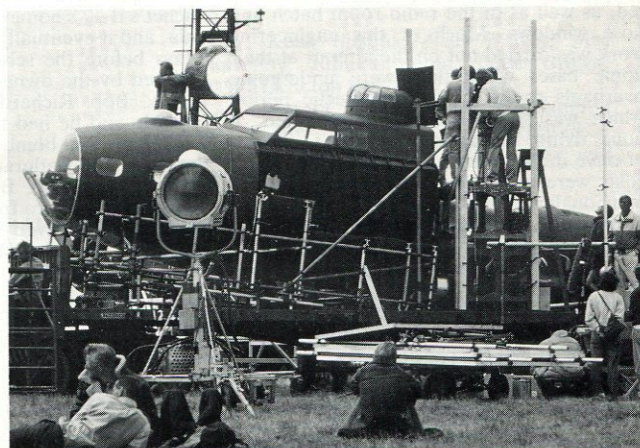
events, the decision was made to separate further. The main reason was to lessen the chance of an unknown veteran claiming he had been portrayed in a defamatory way in the movie. The title was changed to *Southern Belle* and the unit represented in the film was no longer the 91st Bomb Group. However,

when Warners had signed up to back the production, their legal department took a closer look at *Southern Belle*. Informed that there were at least three B-17s with this nickname known to have flown with the Eighth Air Force during wartime, and possibly 100 veterans around the USA with

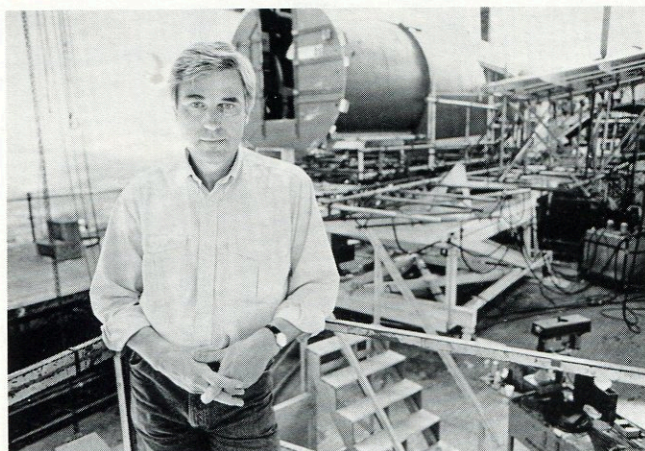
connections to these aircraft, there was a prompt return to *Memphis Belle*. At least all surviving crew members of the real *Memphis Belle* had read the script and given their approval. Also, as far as could be ascertained, there were no other genuine wartime B-17s that had this nickname.



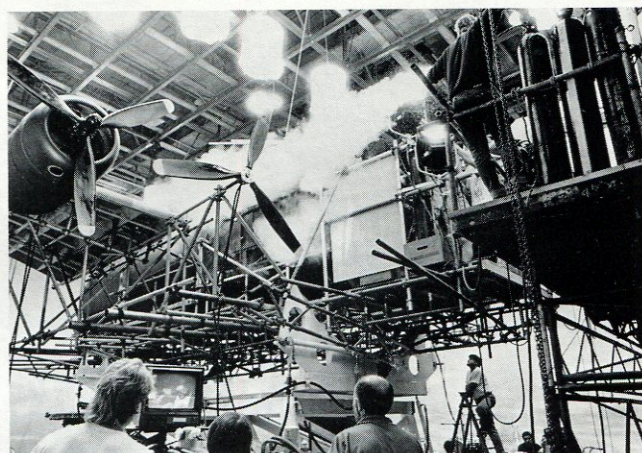
The individual sections were rigged in a variety of positions according to how much or what part was needed. Above: This



set-up was for filming the *Memphis Belle* moving at speed down the runway behind another B-17 taking off.



After the shooting at Binbrook had been completed, the mock-up was taken back to Pinewood. Left: Production Designer, Stuart Craig, with the fuselage now mounted on a huge rocking gimbal. On the left a painted sky backdrop, another of Brian Bishop's masterpieces. Right: The Special Effects department,

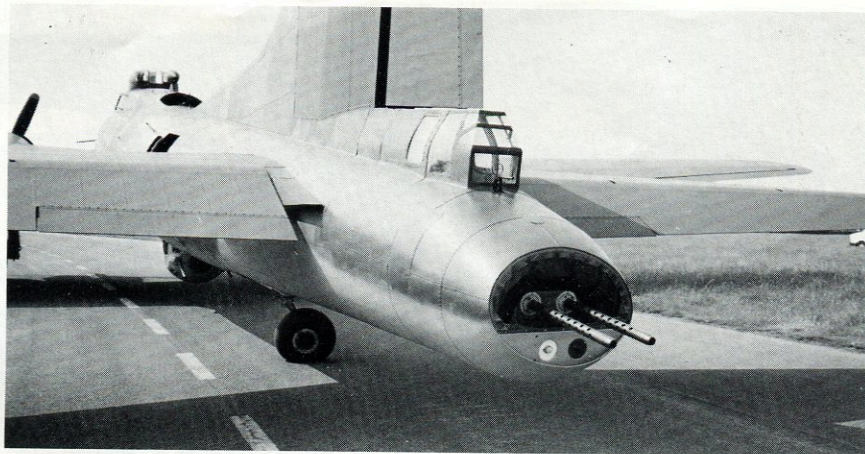


under Richard Conway, uses carbon dioxide to simulate clouds. The video monitor of the camera's viewfinder helps his engineer control the effects. Note how parts which will not appear in shot, like the No. 3 engine and the underside of the starboard wing, have not been provided.



Making a major feature film is well known to be a very expensive business and this one is said to have been budgeted at \$23 million. Any deviation or delays from the planned schedule increases expense by leaps and bounds. For that reason film production is carried out with the precision of a military operation and once committed it has to be today and not tomorrow. To achieve this a 12-hour working day is not unusual.

By mid-March the decision to carry out all the aerial photography in the UK brought a flurry of activity to get the B-17s into Duxford to meet the starting date of June 26. The sole British-based Fortress, familiarly known as *Sally B*, because of availability and access, would feature large in the film makers' plans. This aircraft, owned by B-17 Preservation Limited, was a B-17G model, as were Tallichet's and both the French-owned aircraft to be used in the production. All the European Fortresses were survivors of the fleet once operated by the Institut Géographique National at Creil for high altitude photographic work. For the movie it was necessary to refigure all the 'G' models as B-17Fs, the 'G' not having entered service in the timeframe of the movie. This required the replacing of the stubby Cheyenne tail gun positions with the so-called 'Stinger' model, removing chin turrets and, where necessary, installing ball and upper turrets. The tail turret modifications were achieved by installing a structure of the required type over the existing positions. Several ball and upper turrets had to be specially constructed. Waist windows had to be opened up in rear fuselages and dummy guns and fittings installed, as well as in the radio room hatch and nose windows. Much of this engineering work was carried out on the aircraft at their home bases while they were undergoing overhauls to fit them for a hectic period which was scheduled to involve some 20 hours flying. The appropriate paint schemes of olive drab uppers and neutral grey lower coats were to be applied at Southend. The individual markings decor would be the work of Enigma's Art Department. When fully configured and painted these Fortresses were



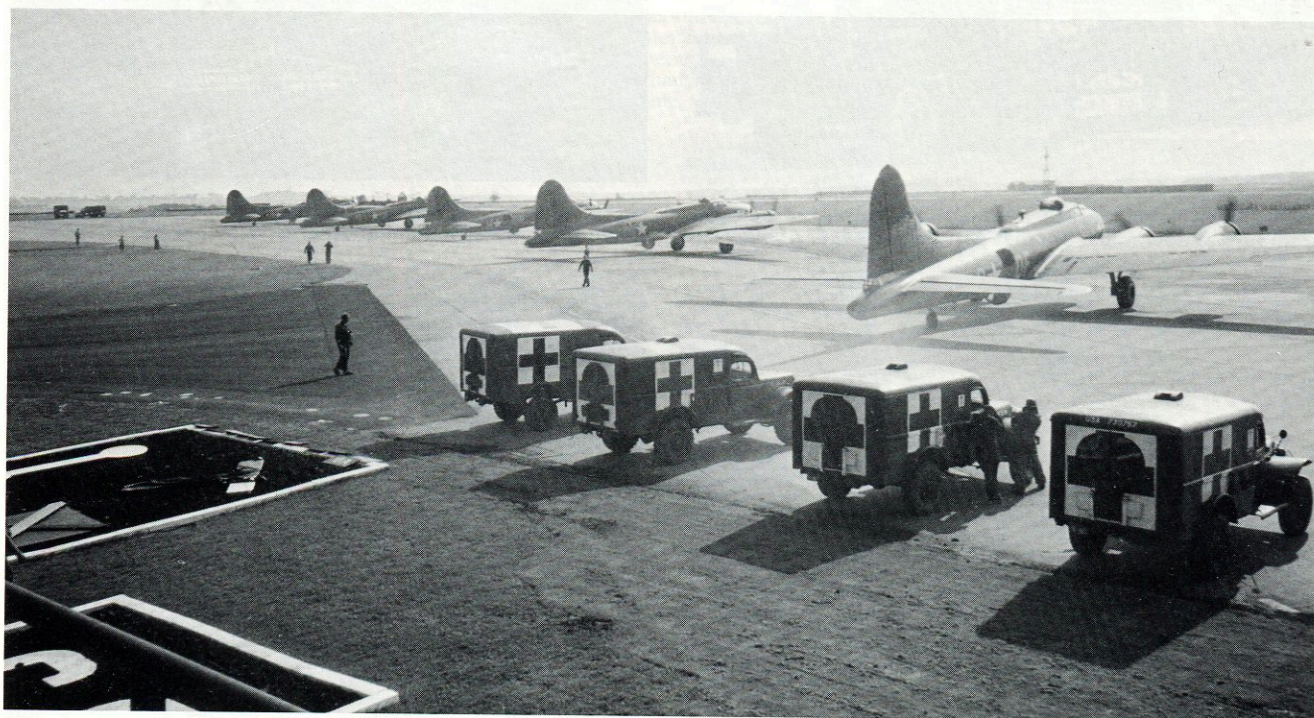
The 'Stinger' tail gun mounting, characteristic of the 'F' model B-17 of the mid-war period, was one of several modifications necessary to transform the four B-17Gs. In this case, the newly-fabricated tail structure — another Mo Gomme special — was neatly fitted over the existing one. The two lights beneath the gun, white to port and red to starboard, were intended to be used to signal to other aircraft when to release bombs.

almost indistinguishable from true B-17Fs of spring 1943. Only the modern radio antenna remained as its removal would have breached CAA regulations.

The two B-17s making the North Atlantic crossing flew across independently and, to avoid any problems with the CAA, Enigma had previously sent B-17 Preservation's Chief Engineer, Peter Brown, to check that all requirements could be met. David Tallichet's B-17's home base was Chino, California, and it eventually reached Duxford three days before the scheduled start of filming, piloted by the owner and with a three-man crew. Bob Richardson's home base was Seattle and he had to install additional fuel tanks in the bomb bay of his B-17F to provide safe endurance for the long North Atlantic crossing. Bad weather at Gander delayed departure from North America and he had not arrived when filming began on schedule on Monday, June 26. The two

French B-17s arrived from Southend that day, resplendent in their new paint schemes. In fact the paintwork was too new for Enigma's Art Department who set about providing a stained and weathered look on all aircraft except the French *Château de Vernieuil* which was to represent a new machine in the film.

While the five B-17s were each to represent an individually named B-17 in the storyline, they also had to serve to represent a bomb group of some 30 aircraft. To this end the Art Department applied one set of identity markings to one side and a different set to the opposite side. In the course of filming markings were frequently changed to further this cause. Only *Memphis Belle* (the Tallichet aircraft) appeared with genuine B-17 markings; likenesses of the real *Memphis Belle* nose insignia, fuselage letters DF☆A and tail number 124485. Other tail numbers were just a few removed from genuine B-17F



The B-17s arrive — July 1989 at Binbrook . . . or is it the summer of 1943 at Bassingbourn? Because the signals square outside the 'new' control tower was displaying the wartime 'BS' identification letters of the latter aerodrome, air traffic control received several messages from RAF aircraft overflying the

airfield complaining that Binbrook was showing an incorrect code! Note also how the grass had to be extended in front of the tower to give it more breathing space. The turf was laid on sand spread over the concrete apron and had to be continually watered to keep it green.





#### AIRCRAFT APPEARING IN MEMPHIS BELLE

B-17F-70-BO	<p>Constructor's No. 4896, AAF 42-29782, civil registration N17W.  Film rôle: <i>C Cup</i>, 124299 DF★X  Crew: Bob Richardson, Donald Clark, Donald Wallace and Henry Strauch.  Oldest B-17 in film having been delivered to USAAF in Feb 1943. Used chiefly for training during WWII. Acquired by Stuttgart, Arkansas, in 1946 for memorial purposes. Sold for commercial use in 1953, a large cargo door being installed the following year. Employed in a fire-fighting rôle and later appeared in the films <i>1,000 Plane Raid</i> (1968) and <i>Tora, Tora, Tora</i> (1969). Owned by Bob Richardson and based at Seattle.</p>	B-17G-105-VE	<p>Constructor's No. 8693, AAF 44-85784, civil registration G-BEDF, <i>Sally B</i>.  Film rôle: Initially <i>Windy City</i>, 22960, DF★M.  Crew: Keith Sissons, Alan Walker, Mac McKenny, John Littleton, Peter Brown, David Littleton and Steve Carter.  Another of the IGN Fortresses and acquired by the late Ted White in 1975. Based at Duxford. Owned by Ellinor Sallingboe and B-17 Preservation.</p>
B-17G-85-VE	<p>Constructor's No. 8246, AAF 44-8846, civil registration F-AZDX, <i>Lucky Lady</i>.  Film rôle: <i>Mother and Country</i>, 25703, DF★S  Crew: J. Gattegno, G. François, J. Galy, A. Domine, P. Blanquart and P. Godefroy.  Only B-17 still flying that is definitely known to have seen combat in WW2. As DS:M of 511th Bomb Sqdn., 351st Bomb Group, it served as squadron lead on seven missions from Polebrook, Northants in April 1945. After USAF service in Europe it was acquired by IGN at Creil and operated on high altitude mapping photography. Now owned by Jean Sallis of La Ferte Alais.</p>	P-51D-20-NA	<p>AAF 44-63221, civil registration N51JJ.  Film rôle: <i>AJ★S Candyman</i>  Owner: Stephan Gray's Fighter Collection.</p>
B-17G-85-DL	<p>Constructor's No. 32187, AAF 44-83546, civil registration N3703G.  Film rôle: <i>Memphis Belle</i>, 124485, DF★A.  Crew: David Tallichet, Joe Krzeminski, Chris Bennett and Shawn Miller.  Operated by USAF in immediate post-war years then used as a flying tanker for commercial work. Now owned by David Tallichet and based at Chino, California.</p>	P-51D-20-NA	<p>AAF 44-72216, civil registration G-BIXL.  Film rôle: <i>AJ★L Miss L</i>  Owner: Robert Lamplough.</p>
B-17G-100-VE	<p>Constructor's No. 8552, AAF 44-85643, civil registration F-BEEFA, <i>Château de Ver-neuil</i>.  Film rôle: <i>Baby Ruth</i>, 124292, DF★U.  Crew: As with F-AZDX. The French contingent operated as a team.  One of the first B-17s obtained by IGN (in 1947) and the last in the Institute's service. Destroyed at Binbrook on July 25, 1989. Owned by IGN.</p>	P-51D-25-NA	<p>AAF 44-72773, civil registration G-SUSY.  Film rôle: <i>AJ★C</i>.  Owner: Charles Church.</p>
		P-51D-25-NA	<p>AAF 44-72917, civil registration G-HAEC.  Film rôle: <i>AJ★A Ding Hao</i>  Owner: Old Flying Machine Company.</p>
		P-51D-25-NA	<p>AAF 44-73877, civil registration N167F.  Film rôle: <i>AJ★N Cisco</i>  Owner: Andres Saether.</p>
		<p>All the above painted to represent aircraft of 356th Fighter Sqdn., 354th Fighter Group, one of the first operational units with Merlin Mustangs. True serial numbers were retained. In addition, two other P-51Ds (Spencer Flack's NL1051S and Doug Arnold's NL314BG) were available for distance shots but retained their usual livery.</p>	
		Hispano HA.1112	<p>MIL Buchon civil registration G-BOML.  Film rôle: Gruppe leader's markings.  Owner: Old Flying Machine Company.</p>
		Hispano HA.1112	<p>MIL Buchon civil registration G-HUNN.  Film rôle: Black 14.  Owner: Charles Church</p>
		Hispano HA.1112	<p>MIL Buchon civil registration D-EFHD.  Film rôle: Black 15.  Owner: Walter Eichorn.</p>





tail numbers of the spring 1943 period, although after a few weeks expediency took over and several deviations from this programme were observed. In addition to the true squadron letters combination DF, the other three squadrons of the bomb group were represented by markings DP, MJ and ZQ, which were hangovers from the *Southern Belle* planning. The Art Department had no difficulty in devising appropriate nicknames and nose art for the different identities. At some time or other *Sally B* portrayed a dozen different B-17s.

Bob Richardson finally arrived at Duxford on Thursday, June 29 with 'only three fans turning'. While on the final leg from Prestwick and only ten minutes from Duxford, No. 4 engine suffered a broken connecting rod and had to be quickly shut down. While discussions on obtaining a replacement engine ensued and the finishing touches were put to the other B-17s, filming concentrated chiefly on the three 'Me 109s' and the Mustangs that were to hand.

Principal camera aircraft for the air-to-air shots was the 'Aces High' B-25 Mitchell that had seen service in many aviation-related feature films. David Watkin (another Oscar recipient) and his camera team began by taking fixed frame shots where the camera does not move and the aircraft must manoeuvre into the picture. This was to provide the backgrounds for superimposing studio action. Enigma had brought over retired Air Vice-Marshal Ronald Dick from the US

Bob Richardson's B-17F (above) was already a film veteran in her own right before he flew her to Britain to star as *C-Cup*. Sadly Bob (below), a 'big' man in every respect, never lived to see the film completed — he died peacefully on April 2, 1990.



Although Roger as Technical Adviser pointed out that, at the time the film story is set, the escort fighters would have been British Spitfires, he was overruled because it was believed that the general public only associated the type with the Battle of Britain. Hence P-51 Mustangs were introduced, albeit some nine months before they actually saw service in Europe! This is *Cisco* owned by Andres Saether.



As far as Luftwaffe fighters were concerned, there was really no choice as the only aircraft which could conceivably be used were the German-designed, Spanish-built, British-engined Hispano Buchons which first caught the public eye in *Battle of Britain* in 1969. Then the film company had managed to field nearly 30 airworthy machines — 20 years later the number had shrunk to 3!



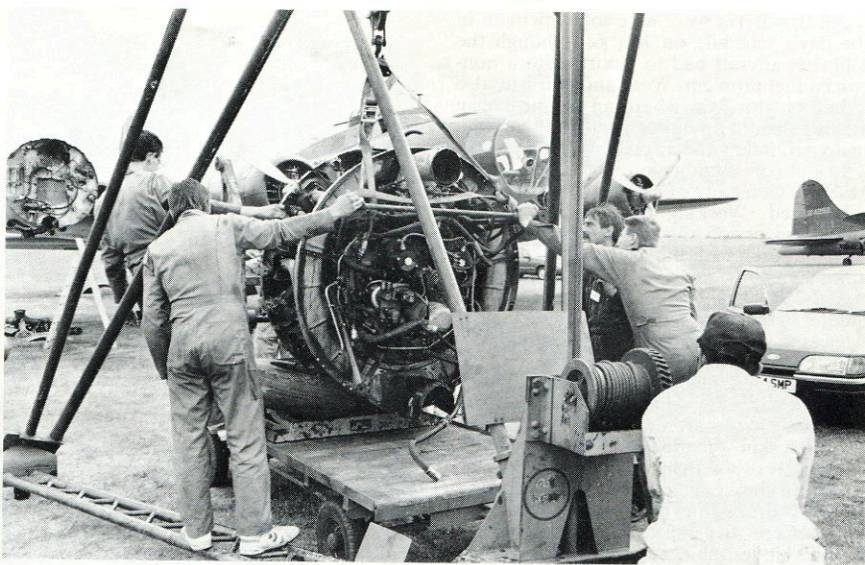
(where he now lives and was once the British Air Attaché) as a back-up pilot. A few years ago Ron Dick flew the B-17 now in the RAF Museum from the US to the UK and is still a qualified B-17 pilot. In the event his services as pilot were not required but he was invaluable in an unforeseen capacity. On his first flight with the camera crew he found the assistant director using the agreed clock system, but for vertical not horizontal directions! To say the least, radio communications between pilots and the air director became confused until Ron Dick acted as an intermediary, translating what the director desired into pilot's language. Attacks by the 'Me 109s' were among the requirements and Ron Dick admits to wincing when some of these were delivered head-on.

To avoid regular military and civil flight paths, the Memphis Belle aircraft were usually directed to the east Norfolk and Suffolk area by RAF air traffic controllers at Honington. More than one rural resident who had not heard of the movie project was astonished to find a World War II air battle above his head. A Norfolk farmer phoned the author to exclaim: 'Am I off my bloody rocker? I've just seen three Fortresses with a couple of Me 109s shooting at them!'

At times it also became a little too exciting for the fliers. While filming formations over Diss on Friday, June 30, Ron Dick saw the cowlings come away from the No. 1 engine of the French B-17 *Lucky Lady*. 'Just as if it had been blasted off. Flew back and scraped the tailplane. Unfortunately, not one of the cameras caught it. There were a few choice gallic curses over the radio.' The cowling was retrieved near Stowmarket by the police and returned to Duxford by the time the B-17s were back on the ground again when it was found that a whole cylinder had come away.

*Lucky Lady* is a nickname by which B-17 registration F-AZDX has been known since becoming part of the Jean Sallis veteran aircraft collection. It was the only one of the five B-17s employed in *Memphis Belle* to have actually seen combat operations during World War II, having flown seven missions from Polebrook, Northamptonshire with the 511th Bomb Squadron in April 1945.

When the media arrived for the first scheduled Press Day on Sunday, July 2, they found two engine changes under way. With the agreement of the IWM, Duxford's static B-17G, *Mary Alice*, became the donor of a replacement engine for Richardson's B-17F while *Lucky Lady* received a reconditioned Wright on hand as a spare in the French camp. Unfortunately, this particular engine had previously been used as the moulding die for fibreglass replicas required as props to be seen in the location filming at Binbrook. Some of the components had been removed and the moulding material had found its way



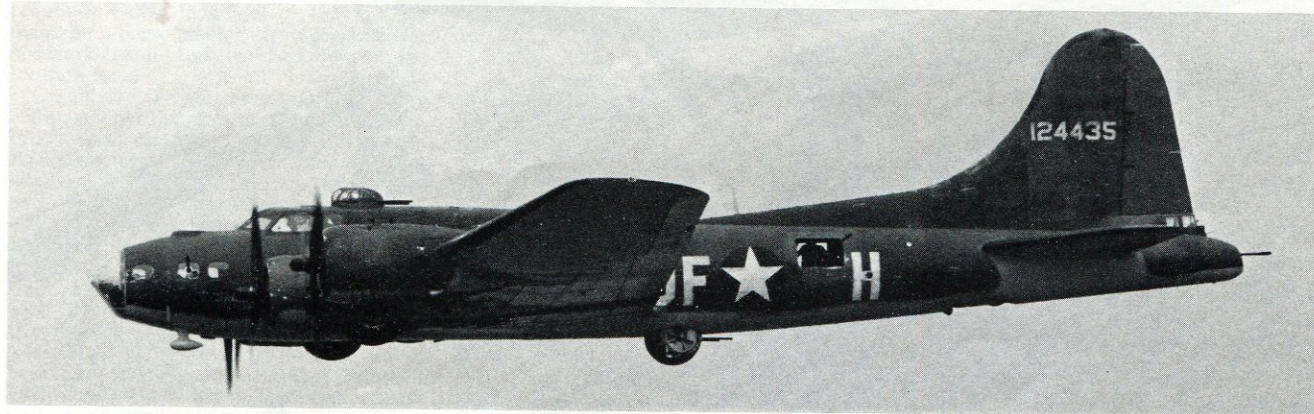
Initially the aircraft were based at Duxford — by coincidence the same airfield used by Spitfire Productions for *Battle of Britain*. In 1969 it was still retained by the RAF on care and maintenance, but by 1989 it had become the thriving home of the Imperial War Museum's collection. Thus when *C-Cup* (above) required a replacement engine, one was readily available from the IWM's *Mary Alice* on static display.



*Mother and Country* (*Lucky Lady*), the only one of the five B-17s to have undertaken combat operations, was also in need of a new engine when a cylinder blew off while filming over Suffolk.

into the oil system. On *Lucky Lady*'s first flight with this engine low oil pressure indicated trouble. A number of engine sump flushings eventually resolved the problem

but not until filming was almost completed. Understandably, this did not please *Lucky Lady*'s crew who were often to be seen working on this engine.



Constant changes in serials and codes were necessary to multiply up the number of aircraft seen in the film. Roger supplied a list of suitable serial numbers and codings, but, under pressure, corners were cut. Here *Memphis Belle*, 124485,

DF☆A (the Tallichet aircraft), has been quickly re-coded with an 'H' and the '8' has just been turned into a '3'. The eagle-eyed enthusiast will also spot one brief moment where an aircraft is seen bearing different names on either side!



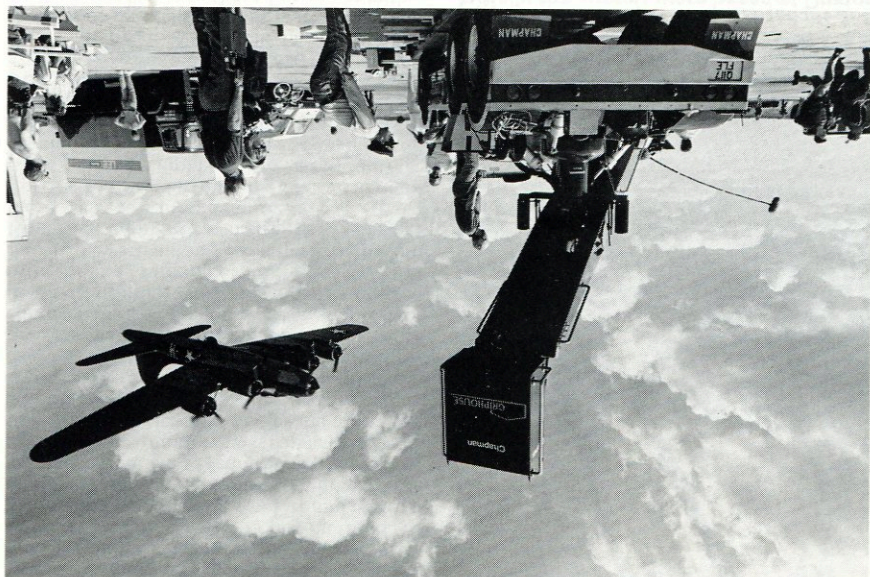


**The Sally B** — which played *Windy City* and *My Zita* among others — was the only aircraft fitted out with smoke pots to simulate engine fire. Here she makes a low pass over the control tower, topped by its glasshouse. The dolly arm supports a remote camera controlled via a video monitor by the camera operator, Derek Browne.

The filming at Duxford had to be terminated following day, while re-dedicating their 'left hardly a dry eye among us'. The spectacle, to quote one former navigator, of 91st BG veterans were visiting. This would pass over Bassingbourn where a party when three of the Fortresses set out on a sortie their flight plan was fixed so that they and through the good offices of Ron Dick, were scheduled to transfer to Bimbrook where main location filming was to commence next day. Prior to leaving Duxford, the veteran aircraft

optimum 25,000 feet so ground-observing cloud below was a useful masking for the film makers. On cloudless days the bright yellow of flowering oilseed rape fields was a pretty but undesirable backdrop; nor could much be done about the modern system of tractor tramlines. A higher altitude than 10,000 feet was desirable but could not be safely attained without engine supercharging or crew oxygen.

**Preparing a scene using the elevating Chapman crane. Michael Caton-Jones, the director, stands with his hands on his thighs in the centre.**



All five B-17s were able to participate in the day's schedule on July 6, although the Tallchett aircraft had to 'abort' with a non-critical fuel problem. Wear and tear was also telling on the B-25 where an engine began making disturbing noises on the 10th, eventually grounding the aircraft. While the B-25 was out of commission the Old Flying Machine Company's Grumman Avenger was substituted. Working from the open rear emplacement of this aircraft was not a popular perch with the cameramen, even on a hot summer's day.

*Sally B* became the workhorse of the quintet in that it was fitted with the necessary devices to simulate an aircraft in distress, and also to carry the largest number of real .50 calibre machine guns to fire blank ammunition. To take the demise of a B-17, small explosive charges were attached to the outer fuselage skin of the aircraft to be fired electrically at the flying director's command. Chemical smoke machines were installed on Nos. 1 and 2 engines which, when activated, gave an effective impression of engine fire smoke. Undesirable smoke was frequently a feature of the atmosphere within the Fortresses when guns were fired. Due to the composition of the blank rounds' charge, the smoke and the pungent smell of cordite made rather unpleasant conditions for the crews. There were problems with these rounds jamming in the ammunition feeds and case links had a propensity to fly out of openings, requiring preventive modifications lest somebody far below received a nasty injury. Real .50s for firing were only installed in the waist, cheek, ball and tail turret positions of *Sally B* and in the cheek and waist positions of the Tallchett aircraft. The former had a specially made ball turret and its guns were operated remotely. The Tallchett B-17 had a genuine ball but the gun installation would not function properly.

Flights were usually of about two hours duration with action photography from 5,000-10,000 feet. The combat altitude of World War II Eighth Air Force B-17s was an



Memorial at Royston, the veterans were treated to a view of all five B-17s in formation.

Some 65 genuine World War II US military vehicles were hired from enthusiasts. Jeeps predominated but there were examples of every type that would have been seen on a wartime USAAF airfield with the exception of the large gasoline tankers and tricycle bomb trollies. An example of the large fuel tankers does not appear to have survived in this country, but at least one tricycle bomb trolley is known but was not located in time for the film.

Art Director Alan Tomkins, and construction manager Bill Welch and his 30-strong team had been at Binbrook for about a month before shooting began. The interior of two Nissen hut sites had been transferred into a communal mess and a briefing room; a bomb dump of fibreglass bombs constructed and perimeter track markings painted out. Various offending structures on the airfield had been suitably camouflaged and a number of B-17 mock-ups constructed out of timber and canvas. At close quarters these appeared extremely crude but at a distance highly effective. Indeed, David Tallichet professed he thought Enigma had managed to find some additional real B-17s when he first noticed these mock-ups in misty visibility on



The vehicles were assembled by John Sargeant of 'Motors for Movies' and Peter Toombs at a total cost of £60,000. Larry Carne (above) was the only enthusiast willing to let his Jeep be overloaded with the entire *Memphis Belle* crew, and his is the one seen in the action shot below. Which are the real aircraft?



arrival from Duxford. The five B-17s had moved out on the afternoon of Sunday, July 16, and flew to Binbrook in formation.

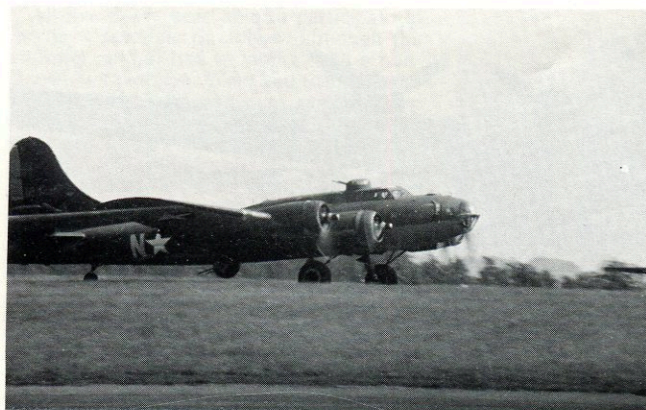
Another early arrival at Binbrook was Kevin Westley, an Assistant Director. His task was to find some 800 extras that were required. Other members of the Enigma team had been making arrangements for accommodation and the logistics of the location force.

On July 16 the greater proportion of the 250 personnel that Enigma brought to Binbrook were on hand, including 24 young American actors. The single actress (British) involved was not scheduled to arrive until two weeks later. The American actors had arrived in the UK in June and following an indoctrination course on Eighth Air Force history and the parts they were to play, Catherine Wyler arranged for them to go to what she called 'boot camp'. Eight days conditioning under the command of ex-SAS Terry Forestal on Dartmoor involved a dose of military-style discipline and drill. To quote Catherine Wyler again, 'to make them understand what soldiering was like and to get them to really know one another'. From their accounts the conditioning was not particularly popular but accepted, as were the uniform short haircuts.



There are several nice instances where the remake mirrors incidents in the original Wyler film. The man with the mouth organ on the bomb train is one example. However, says Alan Tomkins, 'We made the bombs out of fibreglass and plaster — they were not meant to be sat upon!'





Although a crash sequence had been planned for the film, and Alan had already purchased a suitable aircraft wreck for the occasion, no one bargained for a real one! On July 25 *Baby Ruth* — one of the French aircraft — veered off the runway and across the grass. David Lee caught the very moment when things began to go wrong (above left). Failing to gain lift, the



port wing smashed through a tree on the airfield boundary, the aircraft pancaking in a field of growing wheat beyond, breaking its back (above right). Fortunately all aboard got clear before the fire took hold (below left), but there was little the fire brigade could do to contain the blaze once the fuel tanks were alight (below right).

Apart from avid movie-goers, people in the UK will be unfamiliar with most of the actors. Matthew Modine plays the captain of *Memphis Belle* but the screenplay does not really promote a single character, rather a team which is in keeping with the theme of a bomber crew's camaraderie. The three-week location schedule involved shots with the actors around the aircraft and sequences at the control tower, mess hall, briefing room and a hangar dance. Apart from a downpour at the end of the second week, the company enjoyed fine, warm weather. The absence of rain was such that, in the sequence where the *Memphis Belle* crew board a Jeep outside the briefing room and the script calls for mud, it was necessary for Enigma to get the local fire brigade to play hoses on a patch of rotovated turf. To faithfully represent the hive of activity on a wartime bomber airfield, there were many extras dressed as both air and ground personnel, including a few girls in WAC uniforms.

Although the original schedule called for approximately 20 hours flying time by each of the five B-17s during filming, some had put in nearly twice this number by the time location work was completed. The summer drought of 1989 had ripened the cereal harvest some two weeks earlier than normal and the golden harvest fields finally put paid to the efforts to evoke spring 1943. Air-to-air filming while at Duxford had been hindered by the difficulty in obtaining cloud match when it had not been possible to complete a sequence on one particular day.

With predominantly clear skies, flying at Binbrook kept to schedule until, on the afternoon of July 25, an accident occurred that was to bring Enigma and the *Memphis Belle* project into the headlines next day. Starting take-off on main runway 21, the

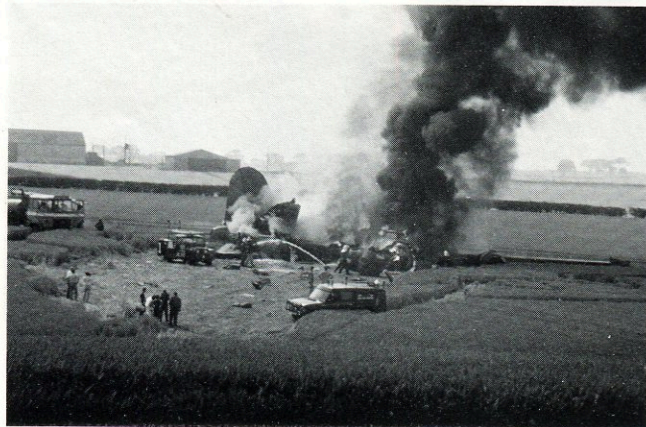


The crash appears to have been caused by a binding brake or wheel bearing as a long skid mark left by one of the mainwheels ran diagonally across the perimeter track. The gap where the port wing went through the tree can also be seen. The pile of gravel on the right bore several clear indentations where one of the propellers had chopped its way past.

French *Château de Vernieuil*, only remaining B-17 in IGN service, piloted by Jean-Pierre Gattegno, suddenly began to pull to the right as the speed built up. The aircraft ran off the runway, still pulling to the right, until heading out near 45 degrees to its original direction. The main undercarriage was still on the ground when the B-17 reached the perimeter track but at this point it appears that the pilot finally managed to become airborne. Then only briefly, for No. 4 propeller cut through a large heap of stone chippings placed on a disused hardstand. This appears to have had the effect of slewing the whole aircraft violently to the left, causing the port wing to strike through the branches of a tree. The aircraft then hurtled over the airfield boundary, across a depression and crashed into a field of near ripe wheat.

There were ten people on board who quickly vacated the wreck with the exception of a girl passenger who remained strapped in her seat. Mike Woodley of Aces High was first on the scene, having driven straight through the perimeter fence, and with the help of the pilot and one of the passengers, quickly re-entered the fuselage and brought the girl out before a fire, that had started in one of the engines, took hold. One of the IGN crew members suffered a fractured leg and a passenger a broken collar bone but the remainder of those on board had escaped with no more than bruises.

Although the fuselage had broken behind the wing in the impact, the B-17 was, remarkably, otherwise fairly uncrumpled. Sadly the engine fire could not be contained as the fire-fighting equipment available was overwhelmed once the flames reached the full fuel load. Apart from the engine blocks and the tail, there was very little left.







A specially-prepared 16-foot model was used for the first part of the spectacular crash sequence which appears early in the film. This was towed behind a car on a pre-planned line but a guide wire failed and the model veered directly towards the camera, hitting the cameraman and putting him in hospital.



For the actual explosion an old Pembroke had been purchased from a scrapyard at Horncastle which was suitably chopped about by the Art Department. Unfortunately, when the first take was filmed (*below*), the fire got out of hand and the tailplane had to be rebuilt for a second attempt.



At the end of the day, with its authentic-looking B-17 tail and camouflage paint scheme, there was little to distinguish the



fake crash (*left*) from the real thing (*right*). Photographs by Alan Tomkins and Larry Carne.





**Above:** David Murphy had to dress 500 extras for the hangar dance ... not including Larry, that is, on the right! **Right:** Some of the local girls display their 1943 talents before shooting begins.



The 700-odd Lincolnshire lads and lasses auditioned for the hangar dance scene came mostly from nearby Grimsby and Cleethorpes. The effort involved in providing uniforms and 1940s dress for this multitude was prodigious. Here Wardrobe Master David Murphy did an outstanding job that involved arranging the tailoring of authentic uniform and flying clothes where every detail

had to be correct. The climax for his wardrobe team was the hangar dance scene where 500 extras displayed their jitterbugging talents. Every girl was clad in the appropriate shoes and summer dress of the times and crowned with a 1940s hairstyle. For these sequences Bob Richardson's B-17 was a backdrop to a band stage. Enigma employed eight boys with pumps to inflate

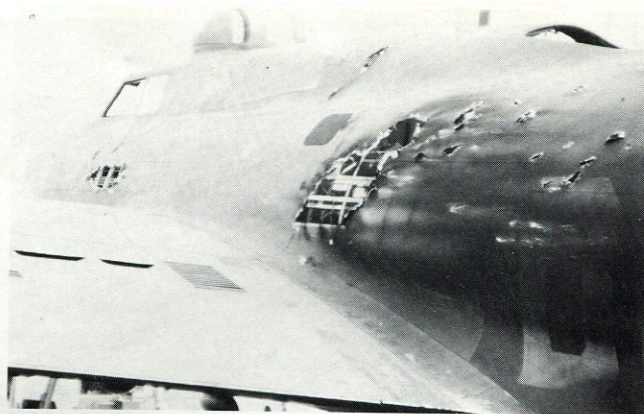
18,000 red, white and blue balloons which were suspended in a net over the dancers. The plan was to do this as a final act to the day's filming on Saturday, July 29. To achieve genuine spontaneous surprise the majority of dance extras did not know when this was going to occur. In the event the hundreds of bursting balloons produced a definite haze through released moisture.



In this scene, *C-Cup* became *Buckaroo*, the building being lit by the beams of two searchlights reflected from mirrors

suspended from the ceiling. The singer is actress Jodie Wilson although she mimes to a pre-recorded voice.





With one B-17 destroyed, and Bob Richardson's 'grounded' for the hangar scene, the three remaining Fortresses had to be worked even harder. *Lucky Lady* was still having engine problems and by the following weekend could only occasionally help *Sally B* and the Tallichet aircraft in representing a whole group take-off. This was achieved by each B-17 completing a circuit and landing to immediately be set upon by the art department who painted out tail number, fuselage letters and nose decor and then painted on a different set. With the new identity another take-off and the procedure repeated again and again. By this time the selection of appropriate tail numbers tended to have gone by the board and the nicknames were produced on the spot. David Tallichet's aircraft made one display with his wife's name, Carol, emblazoned in green on the aircraft's nose. One of the cameramen catching these take-offs was positioned at the end of the east-west runway, prone in the centre, so that the aircraft were passing directly over him at perhaps 10-20 feet.

While Tallichet's aircraft normally played *Memphis Belle*, *Sally B* received this decor during the final days at Binbrook in order to enact *Memphis Belle*'s return with heavy battle damage. B-17 Preservation had agreed to remove the vertical tail unit and replace it with — to quote an observer — 'a badly moth-eaten dummy'. Further heavy battle damage was added by the art department. Good use was made of reflective metallic foil which, when in place, gave the impression of a hole from even a short distance away. Of course, *Sally B* simply simulated a touch-down in this condition: views of the flying wreck making its approach to land involved a radio-controlled model. A spin-off from this employment was that B-17 Preservation engineers had an opportunity to inspect the real fin for any signs of corrosion before it was replaced.

**Damage simulation by Brian Bishop (in picture). Left: Who would think that this shot-through tail is actually perfectly sound? The foil reflects the sky and so makes a perfect match. Right: All this is painted-on damage except the shell-holes which have been carefully positioned over removable panels and a window.**

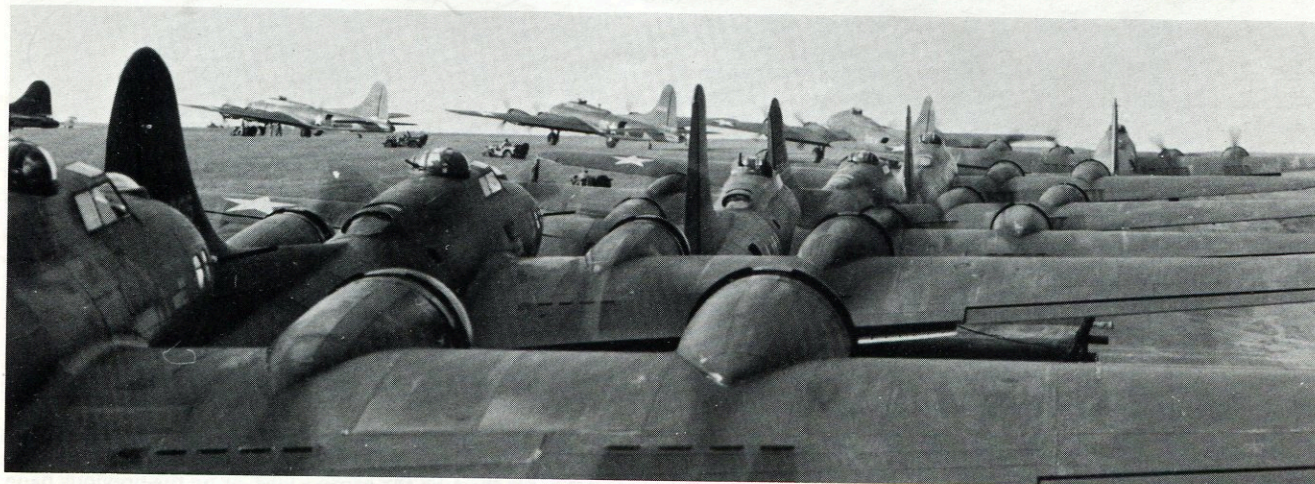


**The *Memphis Belle* comes home with a badly shot-up tail. In fact this is *Sally B* fitted with a false tail made specially by Feggans Brown of East London. Needless to say the aircraft never flew with this damaged tail in position.**

The contract period for the B-17s expired on August 4. *Lucky Lady* returned to France next day and the other three on the 6th; Tallichet for the USA and *Sally B* and the true B-17F for Duxford. Bob Richardson departed for the States from Duxford on August 10 after satisfying himself that all was

well for the Atlantic crossing. *Sally B* was still to come before the cameras again as Enigma sought to fill the gaps or decided on re-takes of certain sequences.

The main filming now shifted to Pinewood and the fuselage mock-up. However, Binbrook was not completely deserted by



**The mass take-off — here 10 B-17s roll down the perimeter track towards the runway. How was it done? Turn over.**

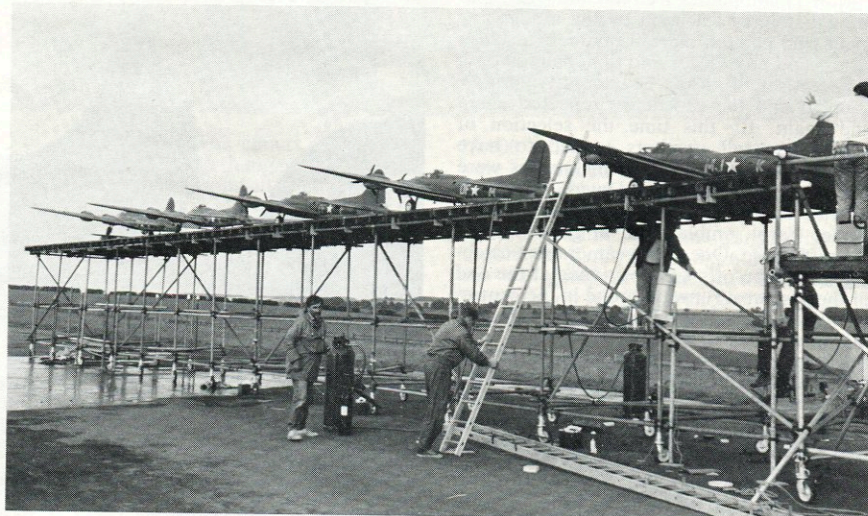




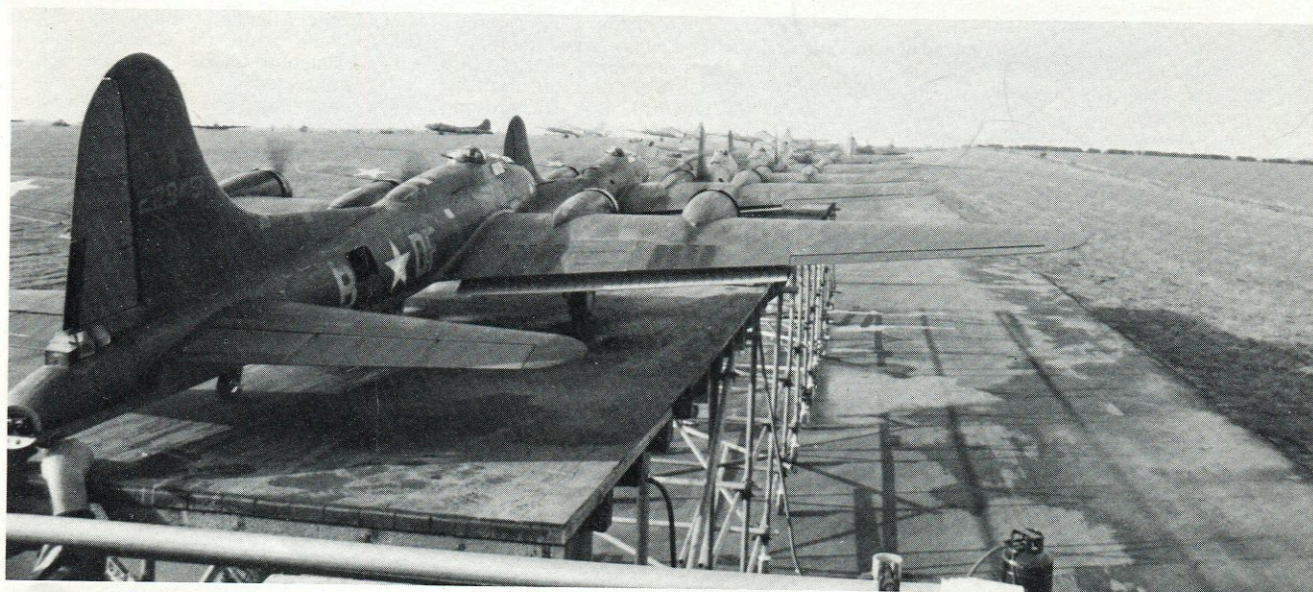
**Now this was clever! Using models with 16-foot wingspans (constructed by the Special Effects Department) and the real B-17s, the secret is to get both in the correct perspective.**

Enigma until September as a second camera unit was involved with filming radio-controlled models. Earlier, five beautifully detailed B-17F models with 16-foot wingspans were commissioned and used in a number of ground sequences. Shots of a column of B-17s taxiing round the perimeter track involved these models. The models did not move, and the sides of the elevated platform on which they were placed corresponded in the camera lens with the edges of the real perimeter track. The B-17s leading the column were real, placed some distance away to appear at the same scale. Similar tricks of the trade were used with grass-surfaced platforms.

Filming with the actors at Pinewood continued for two months and the movie was declared 'all in the can' on October 6. To ensure that the actors operated the studio B-17 correctly, Enigma had Tommy Garcia, a B-17 aficionado, on hand.



**The models were positioned in line astern on an elevated platform, the surface of which had been prepared to blend with the real perimeter track. Richard Conway used bottled propane to create a heat haze.**



**The propellers of the models, driven by electric motors, are started and there are even miniature radio-controlled crewmen who can be moved about inside each aircraft. Ahead the real B-17s make the turn to the left, but they are sufficiently far**

**away for their size to blend with the models. When viewed from this position the trick is obvious, but when seen from the correct angle through the camera lens, as on the previous page, the illusion is perfect.**



As a goodwill gesture and publicity exercise Enigma flew six surviving members of the original *Memphis Belle* crew and their aircraft's crew chief, plus wives, to England in late July. On Saturday the 29th they arrived at Binbrook to see the filming and take part in the following day's press junket. The veterans undoubtedly enjoyed the celebrity treatment they received. Asked about the movie story-line former radio operator/gunner Robert Hanson said that he thought his crew mates viewed it with a mixture of amusement and incredulity. 'They (Enigma) seem to have taken all the tough times we had in 25 missions and put them into one.' Some of the veterans went for a flight in a B-17. Flying with David Tallichet, Bob Morgan was allowed to take the controls for a while. His comment: 'It was like five Christmas's all on the same day.'

For the newcomer to the world of movie-making, there are three impressive factors which were re-emphasised in the making of *Memphis Belle*. The film schedule is near sacrosanct and to keep it a 12-hour day is more the norm than the exception. Operatives who were out on the set at 8.00 a.m. were still there at 8.00 p.m. Secondly, time is so crucial to the budget that no one blinks an eye at on-the-spot additional expenditure. When the producer decided a quarter acre of concrete should be grass, the next day it was! Thirdly, film makers eat exceedingly well. The mobile catering was of an extraordinarily high standard and always seemed to be at hand. The glutton could have a field day and if there were camp followers in the movie caravan then they were surely only there for the food.

Movies may be made or lost in the cutting room but this one grips you from first to last and deserves to succeed. It can also be said



At the end of July, Enigma Films Ltd flew seven members of the wartime crew to Britain to visit the film sets at Binbrook and to meet the Press. On the evening of Saturday, July 29, at the local Royal Air Forces Association HQ in Cleethorpes, Alan Tomkins took this unique picture as each man pointed to himself on the wartime shot. L-R standing: Robert Hanson; Casimer Nastal; Eugene Adkins and Clarence Winchell. Front: James Verinis, Robert Morgan and Charles Leighton. (Cecil Scott and Vincent Evans pictured on page 35 have died but it must also be remembered that, apart from the 10 men who returned to the States for the publicity tour, a total of over 50 different crewmen flew combat missions with the *Memphis Belle*.)

that the degree to which the production team went to ensure authenticity has not been surpassed by any other film about the 1939-1945 air war.

Videocassettes of William Wyler's wartime *'Memphis Belle'* in its original full length version with viewing notes are available in the UK from After the Battle. See order form.



The following morning, out on the field, there was a chance for each man to meet his film counterpart. Matthew Modine: 'It was fun to meet them, although obviously I am playing a very different man in *Memphis Belle*.' The characters in the remake may be fictitious but the events depicted are typical of those

experienced and endured on operations. The film is outstanding for its recreation of the discomforts, the humour, the fears and anxieties, faced daily by thousands of young men during the war — so many of whom failed to return. This film is dedicated to their memory.