WAR

Frankfurt Revisited

ISSUED FORTNIGHTLY BY THE

ARMY BUREAU OF CURRENT AFFAIRS

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Lines of Thought

1. The ideal way to cover the subject of bombing is to invite a member of a bomber crew to talk about his job, and use this pamphlet to provide the questions to keep him talking. But failing this, the first half of the story is best reported on, and the second part which deals with the actual flight is best read aloud. Assume that everyone would like to have been on a bombing raid. Here is the detailed story of someone who had the good fortune to do so.

   Remember that in spite of all that has been written about Bomber Command, the details of its day to day work are still extremely vague in most people's minds. The result of your talk should be twofold : firstly to give a matter-of-fact account of life in an air crew ; secondly to provide a starting point for a discussion on the value of our bombing effort.

2. Perhaps the outstanding military moral is the complete unity of the bomber crew. This unity grows from their technical interdependence and from the nature of their work. A similar spirit is natural to the tank crew, the parachute stick, the mortar team, or in any situation where everyone feels that everyone else knows his job. There could be an interesting and useful discussion on the teamwork situation in your own group. It may not be easy to start because it depends on personal relationships about which people are reluctant to talk. But such a talk, arising in this apparently irrelevant way, can be exceedingly helpful. A useful point on which to launch this discussion is your own experiences of co-operation in previous military or civilian life.

3. During 1943 R.A.F. Bomber Command dropped 136,000 tons of bombs on Germany. Or more than twice the 65,000 tons dropped on this country since the war began. Another 15,000 tons fell on occupied territories and 6,000 tons on Italy ; making a total average of 430 tons of bombs on the enemy every night of 1943.

   The answering German total was under 7 tons a night, or 2,500 for the year.

   By the end of 1943, 20 of Germany's 50 most important cities had been so devastated that they were more of a liability than an asset to the German war machine. Many others, including Berlin, had been severely damaged in varying degree.

★ *Frankfurt Revisited*

Did I ever tell you about my operation ?

By Major ANTHONY COTTERELL,

WAR Staff Writer

THE fact that there is going to be an operation is generally known to the crews about 10 a.m. of the morning of the operation. They don't know where it will be until the briefing later in the day. In the case of the R.A.F. Bomber Station visited, transport left the officers' mess, a requisitioned hotel, two miles from the aerodrome, at 9 a.m.

The pilots report to their Squadron Leader in his office. Three mornings a week there is P.T. for aircrews at 9.30 a.m. to 9.45 a.m. But the general impression is of them waiting around for the decision which is the focal point of their day.

The point is that though they may not have operated for more than a week, they never know each morning whether or not they will be doing so. Of course, extreme weather conditions are a pretty good guide when they get up in the morning. But the weather overhead may have no particular bearing on the weather over Germany that night.

About 10 o'clock the telephone rings to say whether or not there will be operations.

What is the General Time-table for the Air Crews?

Every morning, whether or not they are operating, each aircraft must be tested. If there is no operation they probably make a practice flight. They may do some practice bombing with small practice bombs. If, on the other hand, they are going to be operating that night they will probably do their night flying test—N.F.T.s as the morning tests are called—on the ground. This takes up most of the morning.

In the afternoon there are probably lectures. There is a school for each operational job in the air crew. For instance, the navigators have lectures, inquests and discussions of their own. So do the wireless

operators and the gunners, and the bomb aimers. They finish about tea-time, and the rest of the day is their own.

On this particular day the crews had been flying in the morning, and, at the point when I was introduced, the members of the particular crew to which I had been allotted were on their way to spend Sunday afternoon cleaning their Lancaster, T for Tommy.

There were seven in the crew: pilot, flight engineer, navigator, air bomber (or bomb-aimer), wireless operator, mid-upper gunner and rear-gunner. The Lancaster didn't look sensationally large despite its sensationally large bomb load. The pilot, Knights, showed me round it and indicated where I would stand for the operation, while the rest of the crew cleaned it. Apparently a pilot had to pay a half-crown fine if the Squadron Leader found any uncleaned portion of the aircraft.

Are Any Inquests Held?

We weren't there for long, as we had to be back at 4 p.m. for a post-mortem discussion on the last Berlin raid, which had taken place a few days before. It was held in the briefing room, which was about the size of a small church hall, with a table and forms for each crew.

The Group Captain conducted the meeting. Apparently it was the first of the kind held on this station. He explained that after each operation the report and photographs brought back by each crew were individually considered. He hoped that if the post-mortems were held in the presence of all concerned very useful lessons might be learned. It might help to counteract the tendency to think you knew a thing when you weren't really sure.

But criticism was to be constructive, not destructive. "When I ask why were you 20 miles off track, I don't mean why the hell were you 20 miles off track, I just mean why were you 20 miles off track?"

The various specialist officers, Intelligence, Radio, Ordnance, etc., and the two Squadron Leaders and the Wing Commander sat on each side of him. The Group Captain sat alone at a small table raised on a shallow platform. He had a pile of dossiers before him, one relating to each crew. He took these in turn.

Now, Was Priority Really Necessary?

"Tomlin came back with two engines U/S. and a third likely to go. Very good performance. Now, the point is this—he asked for radio priority, and he couldn't get it because another aircraft already had priority. Now, was it really necessary for the other aircraft to have priority, and why was it necessary?"

The navigator of the crew concerned stood up and said that they had become uncertain of their whereabouts because he, the navigator, had been attending to another member of the crew who was unconscious through oxygen failure. The Group Captain went into the question of why there had been an oxygen failure. He prescribed a revised and

tightened up arrangement for inspecting each man's oxygen mask before taking off.

One crew had complained that the door of the aircraft had blown open. The room became divided into two schools. Those who maintained the official view that it was mechanically impossible for the door to blow open. And those with experience of doors inclined to blow open.

T for Tommy was the last aircraft to be considered. There was laughter in the post-mortem when the Group Captain read out that Knights had bombed on the reciprocal. That is to say, he had been unsatisfied with his first bombing run and hadn't dropped his bombs, but had turned and made another run. To do this he had to fly in the opposite direction to the general traffic path for aircraft over Berlin. It was considered very funny. "I don't know what to say to you," said the Group Captain. "Don't know quite what to say."

"It would have taken too long to circle the town and come in again in the ordinary way, sir," said Knights.

"Yes, couldn't do that over Berlin. Quite hopeless. Yes, I think you were justified. After all, you achieved your primary object. Dropped the bombs on the target. Yes, I think you were justified. Very creditable."

The rest of the day was our own.

Is There Much Excitement Beforehand?

Next morning the pilots were hanging round the Squadron Leader's office in the same way as yesterday.

Nothing definite had come in by 10 o'clock when we went out to the aircraft, though the weather was considered ominously suitable. Accumulators were being changed out in the aircraft, the radio was being tested. A girl's voice said, "I hear you strong and clear. I hear you strong and clear."

Discipline was informal but definite. Or rather, there didn't have to be any. The sense of interdependence between various members of the crew was complete. They all looked to the pilot for guidance. Each one was conscious of his own vital part in the crew. Apart from the pilot, the outstanding character was the tail-gunner who was referred to as "the old man" or "Dad" because of his pessimistic and hypochondriac tendencies. Apparently Dad was inclined to be an alarmist, to see fighters in a clear sky. But this increased the general confidence in him as a tail-gunner. They were convinced that no fighter could possibly catch Dad napping.

"Look at this, that's ominous," said Knights. A 4,000lb. bomb was being towed up to the aircraft on a ground level buggy. The engines were given a ground run. There was a sense of pleasurable excitement as they started up one by one. The compartment warmed up very quickly. A new zest was detectable as it became evident that there was going to be an operation tonight. The sense of adventure is infectious. You feel that you are taking life by the throat and shaking it.

After a cup of tea at the Y.M.C.A. mobile van we drove back to the mess for lunch at noon. My room-mate was changing. He put a small German dictionary in his pocket. "Come in handy in the Stalag," he said.

There was an atmosphere of quietly mounting excitement at lunch. People's minds were obviously slightly ahead of the current meal. Certainly mine was.

Is Briefing Just Like in "Target for Tonight"?

Pilots were to be briefed at 1 p.m. We sat around on wicker chairs and forms in a small room just off the main briefing room. The windows looked out over the airfield, but the aircraft were too dispersed to be visible. This room was the Intelligence Library. It was covered with training pamphlets, intelligence reports, not to mention the ABCA pamphlets. We were still waiting at 1.35 p.m. The pilots were discussing possible destinations.

Eventually the target map was brought in and unveiled. Coloured cords and pins marked the route to and from the target. It was Frankfurt, in South-west Germany. "I hate that name," said Knights. "Biggest concentration of searchlights you ever saw."

Roll call was then taken. The Group Captain came in and sat up on a table.

"Met., will you give your story?" said the Wing Commander. The Meteorological Officer started his technical monologue, illustrated by a large and complicated cloud diagram. "No fronts definitely affecting your route . . . bases should be O.K. to land all night . . ." and so on.

The Intelligence Officer described Frankfurt. Population about 570 thousand, a very important town; a commercial and financial centre; with very vital railway ramifications, also of considerable importance as an industrial centre. The docks had been badly damaged in October of this year.

Are Tactical Details Discussed?

The pilots had each been issued with a map of the target area set in a map-case, on the back of which there was a space marked off under various headings for them to make notes. The Wing Commander said that there would be several hundred aircraft on the raid (he gave the exact figure). The attack would be in waves. He read out which aircraft would be in the various waves.

He went on to give particulars of the petrol load, the bomb load, and the overall or all-up weight of the aircraft. One of these aircraft weighs as much as a small convoy of motor lorries.

"You'll set course over base at 17.50 hours. Must be comfortable at your height—20,000 feet—shortly before crossing the enemy coast. Remain at maximum height all the way to the target. You can climb up afterwards but not above 23,000, as the wind increases at that point."

There was to be a spoof attack on Mannheim, to divert the enemy

defences; this would go in earlier. There would be coffee and sandwiches in the crew-room at 3 p.m., transport at 3.35 p.m. We were to be at the aircraft by 4 p.m. First take-off at 5 p.m. Zero hour would be 7.35 p.m. Zero hour for the last wave would be between 14 and 17 minutes later.

We moved into the neighbouring room for the main briefing. Here the crews were sitting, each of them on their separate tables. Ours was in the middle of the room. Knights started telling them what had gone on in the pilots' briefing. When all the pilots had finished telling their crews the Group Captain stood up on the platform at the end of the room and read out one of the Prime Minister's messages of congratulation to Sir Arthur Harris. The Group Captain said he was sure they would all be glad to hear that Sir Arthur had sent a message expressing their appreciation of the Prime Minister's thoughtfulness. "And I'm sure you will join me in congratulating our late Wing Commander—Wing Commander Abercrombie—on his very well deserved bar to the D.F.C. I wired him congratulations from us all."

He went on to say that Frankfurt had often been scheduled as a target, but bad weather had often interfered. Tonight was perfect. "The Met. merchant won't dare to show his face if anything goes wrong.

"Now let's have 14 first-class aiming-point photographs for the Wing Commander's first trip. Have a good trip—14 aiming-points, remember, and 14 back."

What is it Like, Waiting to Go?

We went to dress ourselves. I put on the whole rigmarole; flying suit, fleece-lined boots, sweater, parachute harness, and Mae West.

We were driven out to the aircraft and stood around warming ourselves at the ground crew's fire which was burning outside their little shack. It was pretty cold. Things were very quiet. No sensation of being surrounded by an air armada waiting to take off. Just a small party in a corner of a big, windy field. It was about twenty to five when Knights said: "Well, better be getting in." The engines were started at 4.50 p.m. The pilot and the engineer started going through their checking and testing rigmarole. I stood just behind them in the gangway which leads past the pilot's chair from the nose where the bomb aimer was reclining to the navigator's position just behind me.

The navigator was a rubicund country boy. He sat at a table which grew out from the wall of the aircraft and worked at his maps.* I had a very good view out of the right-hand side of the aircraft which consisted mostly of glass. I could see out of the left-hand side, but only a limited range of vision owing to the high back of the pilot's seat and the blackout curtain which partitioned off the navigator's

* Navigators have a separate and elaborate briefing: "The major responsibility for arriving at the right place at the right time rests with the navigator of each aircraft. He maps out the route, and then, using the wind directions and speeds obtained from 'met.' plots the times over the turning-points en route. In flight as often as possible he checks his course by obtaining a 'fix'; then calculates any change there has been in wind speed and direction and revises his flight plan."

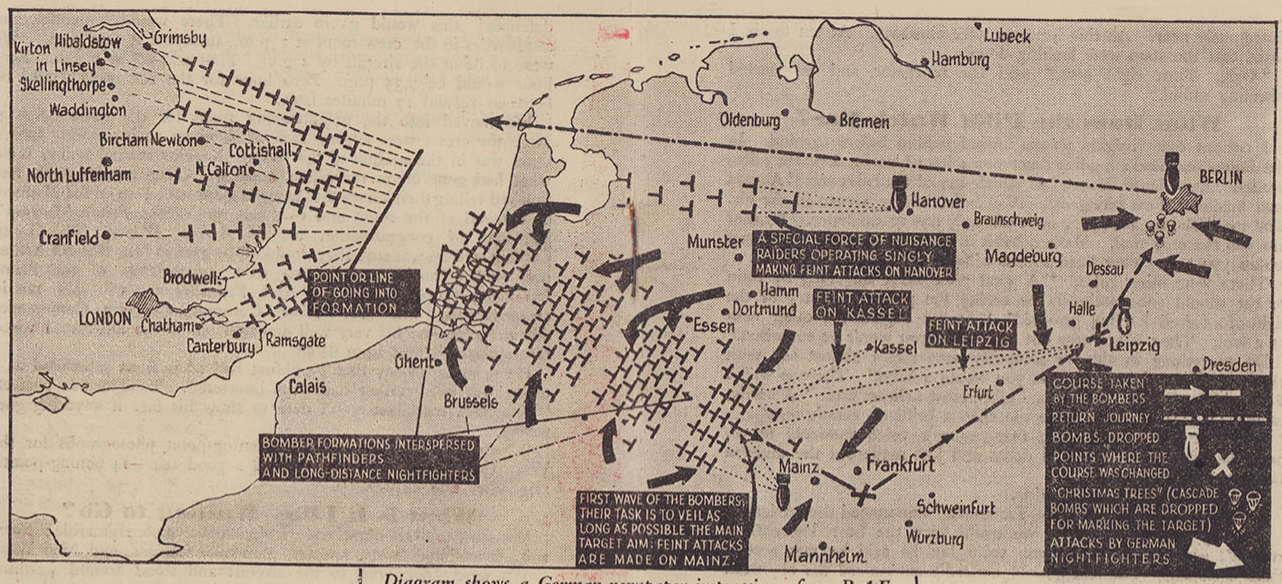


Diagram shows a German newspaper impression of an R.A.F. raid on Berlin, reproduced by courtesy of the News Chronicle.

compartment. Outside the ground crew were shivering with their hands in their pockets.

Do You Climb Up Quickly or Gradually?

"Is the door shut, Bill?" asked the pilot over the inter-com. On hearing that it was he began to start the engines, one by one, from right to left, until the four of them were roaring. Almost immediately the cabin began to get noticeably warmer. The aircraft edged out on to the taxi track. Other aircraft were lumbering in the same direction. Presently we wheeled into the runway past the little group of blue figures standing to watch the take-off and wave good-bye.

The sense of adventure was further enhanced by the gathering darkness into which the aircraft ahead was just disappearing, followed at about 30-second intervals by our own. The pilot and the engineer were meanwhile carrying on their technical dialogue. "Undercarriage," said the pilot.

"Undercarriage up," said the engineer.*

We flew over a river. "Let me know when I'm right over the drome," said the pilot.

"O.K.," said the navigator. "O.K., that'll do."

"O.K., Navigator."

There was a band of olive green, orange and scarlet across the general greyness of the sky: it was like marzipan. Turning round I could look down the length of the aircraft; it looked much bigger in the air than on the ground. There was a slightly sinister red glow from each of the four engines.

The navigator asked the pilot to give him the air speed and height. "170; 11,200," intoned Knights. We started passing large formations of aircraft flying in the opposite direction and distinguishable by their navigation lights. Sometimes they flashed past, seeming to be

* Every 20 minutes the engineer logs the engine temperatures and oil temperatures. He watches the boost and R.P.M. to prevent using fuel unnecessarily. The more fuel they land with the better everyone is pleased. If, say, an engine catches fire, he must feather it, turn off the petrol, try to extinguish the fire; and, if possible, get the engines going again. If the aircraft has to be ditched he is responsible for launching the dinghy.

dangerously near. All this time we were climbing. At ten to six I noted that the stars were looking down.

"O.K. Turn right now," said the navigator, and we started wheeling round.

What Does the Pilot Watch For?

I noticed that Knights always looked behind before turning. In the Squadron Leader's office there was a list of instructions for pilots headed "Experientia Docet," in which one of the rules was "Always look behind before taking off. Also before doing a turn in the air. The machine you are flying isn't the only one in existence. Neither are you the only fool. Make a habit of this, but not the habit that makes you screw your head round without seeing anything."

There were other rules. "A good pilot when travelling by train or car should subconsciously be seeing the passing country in the light of a forced landing ground." "Always regard the other man as a fool. Then if he turns out to be one, you won't be surprised." "Do everything in the air smoothly—one might almost say with rhythm. Treat the machine as you would a lady." The one which I hoped Pilot Officer Knights had taken most to heart was: "A steady, consistent pilot is of far more use than a brilliant, erratic one."

"Is that the coast?" the rear-gunner's voice suddenly asked, over the inter-com. I looked down and just made out the division between land and water.

"Yep, Norfolk," said Knights.

"There's a convoy off Great Yarmouth," announced the navigator.

At 6.25 someone asked if we could have the heat lowered. I couldn't identify the inter-com. voice, but he said he was getting fairly sweating. The rear-gunner excitedly announced the approach of an aircraft and then said, "O.K., Lancaster."

"Keep a good look round, Dad," said the pilot.

What Does Europe Look Like?

Distant flashes and searchlight cones began to be visible. The aircraft broke into an odd swaying motion. As we drew nearer Europe the whole horizon was punctuated by signs of strife. These activities were forbiddingly widespread.

"Coast coming up," said Knights presently.

"You're heading straight for flak," said the bomb aimer.

"That's right, run right into it," said the engineer sarcastically.

Knights was suddenly concerned that his windscreen was icing up. The engineer bent up forward and rubbed the rag round it.

"Two searchlights on the starboard bow," said the tail-gunner.

"O.K.," said Knights.

The aircraft started weaving slightly. The two searchlights were creeping with sinister purposefulness around the sky; every now and then executing a dart as if to demonstrate their reserves of mobility. They seemed to stroke the sky all round us, playing cat and mouse. It seemed unlastably good luck that they didn't find us. There would

be no trouble about the morale of searchlight detachments if the men could be taken for a ride in a bomber and experience the attention and respect induced by the weapons they wield.

I looked at my watch, which I could read quite plainly in the reflected light of the searchlights. It was 6.45 p.m. We seemed to be passing through a belt of searchlights, which in the way of searchlights switched on and off without much apparent logic. There seemed to be no telling where they would spring up next, and this was horrifying.

There seemed to be a lot of gunfire, but nothing came near us. Our relative position to most of the clusters of searchlights took a long time to change, which meant, I suppose, that they were much farther away than I imagined. Quite suddenly, after flying in this atmosphere of action and enemy protest for some time, we were in the clear again. We were in fact clear of the coast, or in the fighters' parlour, according to how you felt. Incidentally, there isn't much you can feel.

Do the Crew Talk Much?

"I think everybody's early, Bob. There's no searchlights at the back now," said the tail-gunner after a little while. The tail-gunner seemed to be easily the best-informed commentator on the social scene. He seemed to know the most and talked the most.* Perhaps his isolation stimulated his appetite for sociability. Presently he said, "There's one going down in flames. Right behind us."

I looked back and couldn't see anything until the engineer pointed it out. I could distinguish a faint, shapeless glow of flames.

It served to emphasise that admission to these quarters was not free. The gate was shut behind. The house was haunted. Europe was all around us and we were all alone. Looking down on the ground you could see odd, inexplicable, unaggressive looking lights from time to time. They had no apparent operational significance, and may even have been blackout infringements of the grosser kind. But they served to emphasise our sense of being cut off. I need hardly say, because it has been said so often already, that this gives one a tremendous sense of comradeship with the other members of the crew. Your companionship with each other knows no inhibitions of temperament or prejudice. Friendship is perfect and complete. The idea of carrying an irritation or a resentment against one of them into the air seems quite out of the question.

"Fighter flares in front," said Knights. "Keep a good look out, Dad."

I began keeping a good look out immediately. I saw a row of orange flares hanging pendant in the sky. They seemed to be quite a distance away, but I distrusted them none the less for that. Having already underestimated the distance of some searchlights, there seems no reason why I shouldn't be overestimating the distance of these flares.

Back in the rear-turret, Dad seemed to be having a whale of a time. He kept asking Knights to switch the aircraft in different directions

* He said his main job was keeping warm and seeing the fighter first. Fighters usually approach from astern and below, unless they get an aircraft silhoutted against a cloud, when they approach from above.

so that he could get a better view of points where he thought he saw a fighter. (Incidentally, though he had nearly finished his operational tour and been on many of the severest recent raids, he had never yet been opened fire on by a fighter.)

The Ruhr ("Happy Valley") was now pointed out to me. I looked and saw nothing but distant cones of searchlights. "I think that's Cologne," said the engineer, pointing at nothing in particular. It wasn't really a very satisfactory view of the Ruhr. But I felt glad to have seen it. It felt very grand to be able to look out of the window and say to oneself: "Oh, yes, of course, the Ruhr."

Are There Many Collisions?

"That's Mannheim. Looks as if they're going in early," said Knights.

You could see it quite plainly ahead of us to the right, though it must have been about a hundred miles away. You could see the clusters of searchlights, the flares, the fires and the flashes. Mannheim is about fifty miles from Frankfurt, and it was about this time that we began to come in sight of our target. There were the same flashes and searchlights, but much more clearly defined. It was quite unlike what I expected. Everything was so neatly beautiful.

"Hello, Bob. Junkers 88 coming up, starboard," said Dad in a sudden urgent voice. Knights threw the aircraft over to allow the gunners to get a better view.

"No, O.K., sorry, it's a Lanc.," said Dad. I looked up and saw that it was indeed a Lanc. Coming towards us in what seemed like a sideways motion. One second a vague shape, it alarmingly materialised and defined its outline. There just seemed no possibility of avoiding collision. It was all over in a second, but it seemed quite a time. It passed just to the rear and slightly high. I looked up and saw its underbelly skim over us. "Jesus, did you see that," said Knights.

"I thought we'd had it that time," said the engineer. The aircraft was still rocking from the impact with the other aircraft's slipstream.

What Does the Target Look Like?

We were now coming up to Frankfurt proper. You could see what looked like hundreds of thousands of electric light bulbs carpeting the ground. It took me some little time to realise that these were incendiaries. They looked so regular and artificial, so naively pretty, that you couldn't associate them with any work of destruction. There was a large, long area of them shaped like the lobes of a gigantic liver.

The sky was suddenly filled with the regular grey puffs of a flak barrage. These barrages seemed to me extraordinarily consistent in their strength. They don't just throw up a few hundred rounds and stop. They continue with what seems like unlimited regularity.

With the flares dropped by the pathfinders, the flares dropped by the enemy fighters, the waving searchlights, the bead-like pattern of incendiary fires on the ground, and the flashes of gunfire, there is a sense of supreme experience and excitement.

Knights was working to keep us out of the clutches of some peculiarly inquisitive searchlights, and away to the right another aircraft had failed to keep out of the way. You could see it wriggling in the cone of searchlights doing their best to hold it there while the guns concentrated on this one aircraft.

The cruel thing is that one's only sensation is one of relief that the searchlights are temporarily diverted elsewhere. You feel no urge to go to the assistance of the unfortunate aircraft that is cornered. Of course, obviously it would be senseless to do so, but it seems extraordinary that one doesn't feel any urge to do so. I noticed the same indifference to the troubles of others when flying with the Americans. There is complete unity within the individual aircraft, but for some reason that seems to be the limit of one's horizon. Nor is it simply the expression of my own individual idiosyncrasy. It was obviously a general state of mind.

Is There a Strict Time-table?

All this time the pilot and the navigator were keeping up a running dialogue on how the time was going for the approach to the target. Apparently we were a minute or two early, so we had to lose that amount of time. It was pretty impressive, if the word isn't too banal, to hear the young men talking about losing a minute or two while passing through this firework display. I hadn't much idea of what was going on. I didn't know whether we were running up to the target or still cruising round, and I didn't want to disturb the crew in any way. It hardly seemed in my best interest to do so. I was anxious that they should give of their best, and concentrate closely on the work in hand, i.e., my safe return to England. But presently I realised that we were running up.

"Get weaving, Skipper, the night's too long," said someone.

"I can't see that river," said Knights.

"Bomb-doors open," said whoever's business it was to open them.

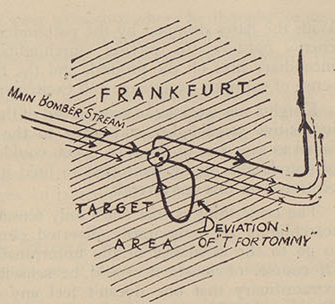
"How're we doing?" said someone.

"Fine," said someone else.

Do They Just Drop Them Anywhere?

The first time over the target, conditions weren't apparently satisfactory. They couldn't see the pathfinding flares which they were supposed to bomb, so we flew across the town, then circled round and

approached the target area from almost the diametrically opposite direction to the main stream of bombers. Coming back on to the target, it was like bright daylight. *



It is very difficult to describe. Nothing that I have ever read on the subject of bombing gave me anything like the impression which I actually had on the spot. I expected something of the atmosphere of a fire-blitz on the ground. I hadn't allowed for the sense of detachment produced by being 20,000 feet high. You knew that down there was a town of half a million people. By staring round the engineer's shoulder I could see the bomb aimer preparing to press the button which would release another 4,000 lbs. on to the town. But it seemed quite unreal.

Can You See the Fires?

The incendiaries were dropped first and then the 4,000 lb. cookie. Just beforehand there was an appreciable tenseness of the crew. The pilot, of course, had to keep the aircraft flying as level as possible for the bombing run. He turned and half rose from his seat as if he was willing the aircraft to a supreme effort. I tried to write down the dialogue between pilot and bomb aimer, but it was too fast for my hobbling shorthand. I wrote it down, but now I can't transcribe it.

I did not feel any appreciable lightness of the aircraft when "bombs away" was announced. All I knew was that the dialogue of "Steady," "Hold her steady," "O.K., Bob," "O.K., Bomb-aimer," and the sing-song intonation of members just before the dropping, subsided.

Knights asked the bomb aimer if he thought they had obtained a satisfactory picture; the bomb aimer thought he had. They were all professionally satisfied with the delivery of the bomb. There was a sense of achievement. The engineer pointed out the burning streets of Frankfurt. I could just make them out from an orange streak in the carpet of fairy-like lights produced by the incendiaries. I tried to think of the spectacle in terms of what was going on twenty thousand feet below, but it was just impossible to worry about. Mostly, I

* Approaching the target the bomb-aimer reports every indication of position to the navigator. "When the navigator judges the aircraft to be over the target area the bomb-aimer guides the aircraft through the flak until he sees his target in the bomb-sight and releases his bombs." He tries to drop the cookie in the middle of the incendiaries. When the bombs drop the navigator logs the time, heading of the aircraft, speed and height. These particulars enable Intelligence to plot where the bomb has fallen. The diagram on this page is reproduced from a rough sketch made by the navigator.

suppose, because we had plenty to worry about twenty thousand feet above.

The amount of fun and fury and fighter flares was extraordinary. The sky was simply full of trouble. Yet, oddly enough, it was difficult to think of us in this particular aircraft as actively threatened by sudden death. I don't mean that, speaking for myself, I wasn't afraid. Certainly I was in a state of great alarm. But I didn't really expect that we in this aircraft would buy it.

Were Many Shot Down?

There seemed to be plenty to buy. The tail-gunner reported that he counted 49 fighter flares. Just afterwards he reported a fight going on behind us to starboard. I looked back and saw the flares and stabs of flame. This and the one we saw just after crossing the coast were the only two aircraft we saw going down, though we later learned that 42 aircraft had been lost that night.

"Is there a small defended area on the starboard?" Knights asked the navigator. Two or three of the crew got into an argument as to whether it was Aachen or Brussels. "That's Antwerp a bit farther up," said one of them. It was ridiculous to hear the young men talk of the cities of Western Europe in terms of where they were last Friday, no, I'm a liar, that was Tuesday; or knowing their way so matter of factly round the Continent in these bizarre circumstances. They knew them not by their cultural monuments, their political significance or their hotels, but simply by their flak and searchlight barrages. They all looked alike to me, but I was told that after only two or three trips you remember the way awfully well.

There was quite a lot of flak going up over Brussels. We crossed the coast in the neighbourhood of Rotterdam. And just before doing so were nearly caught by searchlights. "Hello, they're having a go," said Knights, as the light seemed to lift the fuselage. The aircraft started weaving as, amid the incongruously facetious encouragement of the crew, Knights went about the routine of evasion.

When you consider how large the coast of Europe is it seems extraordinary how difficult it is to cross it without coming up against resistance of one kind or another. "Keep a good look out, Dad. See we're not being followed," said Knights. "O.K.," said Dad.

Do You Get Anything to Eat?

It seemed a long way back over the North Sea. I was getting very tired of standing. The engineer let me sit on his seat for a spell, but then he had to have it back to go on with his business.

Coffee was now served from Thermos flasks. I opened the paper bag of rations with which we had been issued. There was an orange,

a packet of chocolate, some boiled sweets, and two packets of chewing gum. I ate the chocolate, but with difficulty, as it was frozen hard. I then ate the orange, which was also frozen. In fact, the emotional experience of eating that orange was quite lost. It was painfully cold in the mouth.

We were now down to 10,000 or 11,000 feet and had taken off our oxygen masks. It wasn't long, but it seemed long, before we were skirting the English coast. There were searchlights here, too, but what a difference in their attitude. These were kindly lights pointing the way to security, not fingers of fate contriving your doom.

It was now something past 10 p.m., and we were due to land at 11 p.m. That last hour seemed interminable. I found it odd that I hadn't any particular sense of achievement, such as I had anticipated. All I felt was awfully tired.

The landing grounds were illuminated by circles of tiny light. And over each aerodrome there was a guiding cone of searchlights. The odd thing was at this height they seemed so very close together. It was as if all the landing grounds were in adjoining fields, instead of being many miles apart. I got to the point where I didn't think we were ever going to land, but eventually we did.

We were driven back to be interrogated, and then home to the mess for bacon and egg.

I got to bed some time after 2 a.m.

This crew had been on operations for some time, and expected to finish their term in a month or so. The operations weren't at all monotonous, said Knights, but they were all of a kind. After the first few trips you learned your way round. Some crews regarded the business as getting progressively easier with each raid, but this crew made a point of regarding each raid as the first. They thought that was the surest way of getting through.

Two Footnotes

1. An R.A.F. officer with whom this pamphlet was discussed, said :—
"It may be a good thing to stress the immense amount of scientific knowledge that crews must have, despite the blasé way in which they refer to 'luck' and one trip being very much like another. It is only their intensive training before ever they reach an operational squadron, the continuation of training and practice when they do get to an operational station, the mastery of their aircraft and weapons, and their experience over enemy territory, that can make them appear to be so blasé."

2. An American Fortress crew with which I flew on daylight operations said that they would be scared stiff to fly at night in the R.A.F. fashion. While the R.A.F. crew said that they would be scared stiff to fly by day. There seems to be a moral lurking somewhere here.