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Introduction: significance of the document

The document consists of a series of monthly summaries of German aircraft deliveries, arranged by aircraft type and aircraft class: fighters, bombers, reconnaissance aircraft and other classes of aircraft. Fragments of similar information have already been available to historians. These are monthly delivery summaries for the periods January-November 1941 and January-November 1944. The reason the document under discussion here is fundamentally different is because it provides such data for a much longer period, ending in 1943. Analysing the entire series of reports contained within this document and combining the information with other, previously known, documents will allow a much more detailed insight into the overall priorities and production performance of the German aircraft industry than has so far been available. The implications of this for the study of the air war and the Second World War as a whole are significant, since a new light is thrown onto the evolution of German production during the critical years of the war, when the Nazi regime passed from rapid victories to catastrophic defeats. Some of the implications are discussed using the example provided below. First, the nature of the information presented in the document will be discussed.

I am grateful to the British aviation historians Steve Coates and Ivor Nigel Moore for their cooperation in obtaining copies of this document.

Format of the document

The format of the monthly delivery summaries varied somewhat over time. The one for June 1943 consists of three pages of tables, each table consisting of eight columns. To aid understanding, the columns have been numbered here, from left to right:

1. Flugzeug-Muster. English translation: Aircraft type.

An important reason why this series of tables is particularly useful is that there is a separate row for every specific sub-type of an aircraft, for example the Focke-Wulf FW 190 A-5. Many other documents provide only summary information for a particular type, for example only the total number of FW 190s produced during a given period. Given that different sub-types of the same aircraft could have substantially different performance and hence operational significance, as will be discussed below, this data is exceptionally useful for analysing the link between German aircraft production and the course of the air war.

2. nach Progr. 223 – nach Programm 223. English translation: According to programme 223.

This is the planned number of aircraft which were to have been built during a given month, as directed by the aircraft production programme currently in force. In June 1943, the current programme was 223. The data in this column allows the reader to compare planned output with actual performance. For some types, the differences between the numbers in this column and column 4 are very striking.

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3. m. Vorl. bzw. Rückst. – mit Vorlieferungen, beziehungsweise Rückstand. English translation: taking into account advance deliveries, respectively backlog.

This is a dynamic indicator of performance over time, it shows whether the overall performance over previous months meant there was a backlog of deliveries compared with the plan, or the reverse – that deliveries were running ahead of the planned schedule.

4. übernommen seit 1.6. English translation: taken over since 1 June.

This is the most important column in the file. It shows how many aircraft were in fact taken over by the Luftwaffe during a given month, in this case June 1943.

5. noch abzuholen. English translation: still to remaining to be collected.

These aircraft were ready for transfer to the Luftwaffe, but the transfer had not yet been completed.

6. im Einflug. English translation: being flown in check flights.

Aircraft were flown at the factory to check that they had been satisfactorily manufactured. If any defects were observed, there could be a substantial delay until final acceptance.

7. klar zum 1. Flug – klar zum ersten Flug. English translation: ready for first flight.

The aircraft in this column were factory fresh and ready for their very first flight.

8. Vorschau lt. BAL v. 1.6. – Vorschau laut Bauaufsicht Luft (Bauaufsichten des Reichsluftfahrtministerium) von 1.6. English translation: Forecast according to the Administration for the Supervision of Construction of the Reich Air Ministry as of 1 June. ¹

The *Bauaufsicht Luft* was the acceptance agency of the Air Ministry, so this column gives the number of aircraft that the agency expected to accept into service during the month. Therefore, any difference between this number and the number in column 4, the number of aircraft actually accepted, shows whether the aircraft industry had met or had failed to meet performance expectations in real time, over the course of a given month.

Example – Focke-Wulf 190 deliveries in June 1943 and their implications

The Focke-Wulf FW 190 was an exceptionally important aircraft of the Second World War period, for several reasons. First, it was Germany's second most numerous aircraft, surpassed in production numbers only by the Messerschmitt Bf 109. Furthermore, it was the only new German aircraft design, introduced after the outbreak of the war in 1939, which was produced in quantity before the outcome of the war had been substantively decided. Finally, for a substantial period of time the FW 190 held a performance

¹ See definition of *Bauaufsicht Luft* at the following link: Dörenberg, Frank. 'RV12P4000 vacuum tube – Nonstop Systems.' https://www.nonstopsystems.com/radio/hellschreiber-tubes.htm (Accessed 14 December 2020)

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advantage over many Allied aircraft types, and thus posed a significant challenge in the battle for air superiority over Europe. The summary of FW 190 deliveries in June 1943 is presented below:

1. Aircraft type	2. According to programme 223	3. advance deliveries, respectively backlog	4. taken over	5. remaining to be collected	6. in check flights	7. ready for first flight	8. Forecast as of 1 June
FW 190 A 5	91	98	43	6	1	-	56
FW 190 A 6	22	13	66	42	43	10	67
FW 190 A 5/U 8	96	72	120	35	13	7	90
FW 190 A 6/U 8	9	9	1	-	-	-	9
FW 190 A 5/U 3tp	-	1	1	-	-	-	1
FW 190 A 5/U 17tp	47	40	55	16	5	1	47
Sum of above	265	233	285	99	62	18	270

Comparing columns 2 and 3, it can be seen that the FW 190 production programme had performed well over time. It had been planned to produce 265 aircraft, while the backlog compared to the plan was only 233. Therefore, production was 32 aircraft ahead of the plan at the start of the month. Forecast performance, in column 8, was 5 aircraft more than the monthly plan, a total of 270. Actual performance, in column 4, was even better. 285 aircraft were taken over. A total of 179 more FW 190s were in various stages of preparation for handover, summarising the data presented in columns 5 through 7.

Even though in nominal terms the production situation was good, an assessment of production by sub-type shows that the strategic implications were in fact very serious for Germany's prospects of maintaining even a degree of balance in the air war. Of the 285 aircraft handed over during the month, only two-fifths – 109 – were fighters, the A-5 and A-6 sub-types. The most common sub-type in June 1943, the FW 190 A-5/U8, was not a fighter. These 120 aircraft were instead *Jaborei* – long-range fighter bombers. So was the projected FW 190 A-6/U8. The other 56 aircraft handed over, the A-5/U3 tp and the A-5/U17 tp, were *Schlacht* aircraft – ground-attack versions similar to the fighter-bomber version but without its extended-range capability.

In the month preceding the great air battles of July 1943; Sicily, Kursk and Hamburg, the production of the FW 190 was focused not on winning back air superiority from the Allies, but on ground attack. Germany's fighter shortage would only increase. Furthermore, the distribution of priorities among the attack versions of FW 190 showed that Germany's entire military strategy had lost coherence. The long-range fighter bomber was intended for operations against the Western Allies – for 'tip and run' low-level raids on Britain and attacks on well-defended targets in the Mediterranean. It was not intended for the Eastern front, nor was it deployed there until a later time. Therefore, the focus on ground attack Focke-Wulfs at the expense of fighters did not bring much relief to the German land army fighting at Kursk – the *Jaborei* were expended in a futile attempt to

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counter-attack overwhelmingly superior Allied forces, and had no role to play in Germany's final offensive in the East. Thus, not only was Germany fielding the wrong types of aircraft, it was using them in a way which worsened, rather than improved, the overall position of the Nazi regime.

As demonstrated by the above, the data in this document does not just show the details of German aircraft production, it also displays the interaction between flawed production planning and a failed military strategy, when considered in context.