

the needs of front-line units and there is one recorded instance of an He 219 being fitted with a 37 mm *Rheinmetall-Borsig* BK 3,7 cannon. Effective from about June 1944 the He 219 was fitted with *Schrage Musik* upward-firing weapons. This was based on the installation of two 30 mm MK 108 cannon in the rear fuselage. At least one front-line conversion saw the installation of two 20 mm MG 151/20 cannon with specially shortened barrels.

Sighting of the forward-firing armament was provided by a standard *Revi* 16 B reflector gunsight. Sighting of the *Schrage Musik* weapons was provided by a *Revi* 16 A-N gunsight which projected the sighting lines onto a screen above the pilot's head.

#### Radio and Radar Equipment

*FuG* 10 P radio and navigational equipment.

*FuG* 16 ZE (ZY effective from He 219 A-074).

*FuBl* 2 F blind landing equipment

*FuG* 101 A radio altimeter

*FuG* 25 A IFF equipment

*Peil* G 6 direction finding

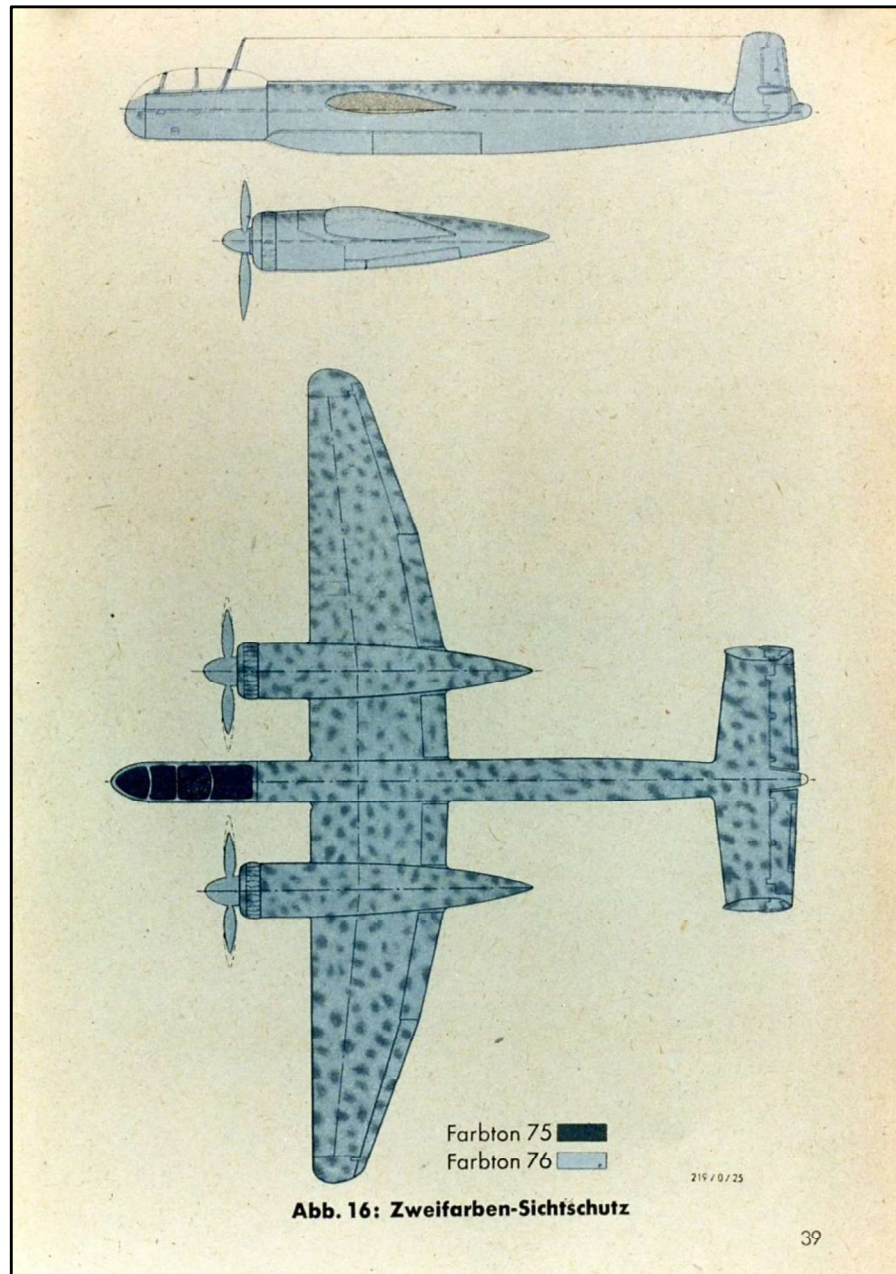
*Lichtenstein* radar:

Early machines fitted with *FuG* 202 *Lichtenstein* BC. Later machines (up to April/May 1944) fitted with *FuG* 220 *Lichtenstein* SN-2 augmented by *FuG* 212 *Lichtenstein* C-1. After April/May 1944 machines fitted with later versions of *FuG* 220 *Lichtenstein* SN-2 (without *FuG* 212 *Lichtenstein* C-1). At least one late-war machine fitted with *FuG* 218 *Neptun* radar in lieu of SN-2. Several machines fitted with *Naxos* passive radar in 1944.

Main Sources:

- He 219 A-0 *Bedienungsvorschrift-Fl.* March 1944 (*Stand* January 1944)
- *Werkschrift D. (Luft)* T.2219 A-0, *Teil* 0, January 1944 (*Stand* September 1943) and *Teil* 8A (March 1944) via Bateson, p.204.
- The photographic and historical records.

Page 39 of the He 219 *Handbuch* (seen at right) gives a generalized impression of the RLM 75/76 camouflage scheme worn by the He 219 from about late 1943. (via Michael Ullmann)



## Appendix 4 – He 219 *Werknummern* and *Stammkennzeichen*

| A-0number      | <i>Werknummer</i> | <i>Stammkennzeichen</i> | A-0number | <i>Werknummer</i> | <i>Stammkennzeichen</i> | A-0number  | <i>Werknummer</i> | <i>Stammkennzeichen</i> |
|----------------|-------------------|-------------------------|-----------|-------------------|-------------------------|------------|-------------------|-------------------------|
| Not applicable | 219001            | VG + LW                 | A-033     | 190104            | RL + AW                 | A-077      | 190191            | BE + JD                 |
|                | 190002            | GG + WG                 | A-034     | 190105            | DV + DA                 | A-078      | 190192            | BE + JE                 |
|                | 190003            | GG + WH                 | A-035     | 190106            | DV + DB                 | A-079      | 190193            | BE + JF                 |
|                | 190004            | DH + PT                 | A-036     | 190107            | DV + DC                 | A-080      | 190194            | BE + JG                 |
|                | 190005            | DH + PU                 | A-037     | 190108            | DV + DD                 | A-081      | 190210            | BE + JH                 |
|                | 190006            | DH + PV                 | A-038     | 190109            | DV + DE                 | A-082      | 190211            | BE + JI                 |
|                | 190007            | DH + PW                 | A-039     | 190110            | DV + DF                 | A-083      | 190212            | BE + JJ                 |
|                | 190008            | DH + PX                 | A-040     | 190111            | DV + DG                 | A-084      | 190213            | BE + JK                 |
|                | 190009            | See Note 1              | A-041     | 190112            | DV + DH                 | A-085      | 190214            | BE + JL                 |
|                | 190010            |                         | A-042     | 190113            | DV + DI                 | A-086      | 190215            | BE + JM                 |
|                | 190011            | VO + BC                 | A-043     | 190114            | DV + DJ                 | A-087      | 190216            | BE + JN                 |
|                | 190012            | See Note 1              | A-044     | 190115            | DV + DK                 | A-088      | 190217            | BE + JO                 |
| A-01           | 190051            | PK + QA                 | A-045     | 190116            | DV + DL                 | A-089      | 190218            | BE + JP                 |
| A-02           | 190052            | PK + QB                 | A-046     | 190117            | DV + DM                 | A-090      | 190219            | BE + JQ                 |
| A-03           | 190053            | PK + QC                 | A-047     | 190118            | DV + DN                 | A-091      | 190220            | BE + JR                 |
| A-04           | 190054            | PK + QD                 | A-048     | 190119            | DV + DO                 | A-092      | 190221            | BE + JS                 |
| A-05           | 190055            | PK + QE                 | A-049     | 190120            | DV + DP                 | A-093      | 190222            | BE + JT                 |
| A-06           | 190056            | PK + QF                 | A-050     | 190121            | DV + DQ                 | A-094      | 190223            | BE + JU                 |
| A-07           | 190057            | PK + QG                 | A-051     | 190122            | DV + DR                 | A-095      | 190224            | BE + JV                 |
| A-08           | 190058            | PK + QH                 | A-052     | 190123            | DV + DS                 | A-096      | 190225            | BE + JW                 |
| A-09           | 190059            | PK + QI                 | A-053     | 190124            | DV + DT                 | A-097      | 190226            | BE + JX                 |
| A-010          | 190060            | PK + QJ                 | A-054     | 190125            | GU + BA                 | A-098      | 190227            | See Note 2              |
| A-011          | 190061            | RL + AA                 | A-055     | 190126            | GU + BB                 | A-099      | 190228            |                         |
| A-012          | 190062            | RL + AB                 | A-056     | 190127            | GU + BC                 | A-100      | 190229            |                         |
| A-013          | 190063            | RL + AC                 | A-057     | 190128            | GU + BD                 | A-101      | 190230            |                         |
| A-014          | 190064            | RL + AD                 | A-058     | 190129            | GU + BE                 | A-102      | 190231            |                         |
| A-015          | 190065            | RL + AE                 | A-059     | 190130            | GU + BF                 | A-103      | 190232            |                         |
| A-016          | 190066            | RL + AF                 | A-060     | 190131            | GU + BG                 | A-104      | 190233            |                         |
| A-017          | 190067            | RL + AG                 | A-061     | 190175            | GU + BH                 | A-105      | 190234            |                         |
| A-018          | 190068            | RL + AH                 | A-062     | 190176            | GU + BI                 | A-106      | 190235            |                         |
| A-019          | 190069            | RL + AI                 | A-063     | 190177            | GU + BJ                 | See Note 3 | 210901            |                         |
| A-020          | 190070            | RL + AJ                 | A-064     | 190178            | GU + BK                 |            | 210902            |                         |
| A-021          | 190071            | RL + AK                 | A-065     | 190179            | GU + BL                 |            | 210903            | SP + CR                 |
| A-022          | 190072            | RL + AL                 | A-066     | 190180            | GU + BM                 |            | 210904            | See Note 4              |
| A-023          | 190073            | RL + AM                 | A-067     | 190181            | GU + BN                 |            | 210905            |                         |
| A-024          | 190074            | RL + AN                 | A-068     | 190182            | GU + BO                 |            | 211116            |                         |
| A-025          | 190075            | RL + AO                 | A-069     | 190183            | GU + BP                 |            | 211117            |                         |
| A-026          | 190097            | RL + AP                 | A-070     | 190184            | GU + BQ                 |            | 211118            |                         |
| A-027          | 190098            | RL + AQ                 | A-071     | 190185            | GU + BR                 |            | 211119            |                         |
| A-028          | 190099            | RL + AR                 | A-072     | 190186            | GU + BS                 |            | 211120            |                         |
| A-029          | 190100            | RL + AS                 | A-073     | 190187            | GU + BT                 |            | 211121            |                         |
| A-030          | 190101            | RL + AT                 | A-074     | 190188            | BE + JA                 |            | 211122            |                         |
| A-031          | 190102            | RL + AU                 | A-075     | 190189            | BE + JB                 | 211123     |                   |                         |
| A-032          | 190103            | RL + AV                 | A-076     | 190190            | BE + JC                 | 211124     |                   |                         |
|                |                   |                         |           |                   |                         | 211125     |                   |                         |

### Notes:

- The *Stammkennzeichen* are unknown, but almost certainly they were VO + BA (*W*Nr.190009), VO + BB (*W*Nr.190010) and VO + BD (*W*Nr.190012), respectively. (*W*Nr.190009 and 190010 were once thought to be DH + PY and DH + PZ but this now seems unlikely).
- The *Stammkennzeichen* for He 219 A-098 to A-1016 are unknown. The *Stammkennzeichen* series BE + J may have extended to Y or Z, but no firm evidence of this has been found.
- The A-0numbers are unknown; they may have been A-0107 to A-0121, but are more likely to have been A-0121 to A-0135.
- In relation to the A-0 pre-production machines produced at Rostock-Marienehe the only known connection between *Werknummer* and *Stammkennzeichen* occurs at *W*Nr.210903 which is firmly linked to SP + CR. This suggests that the SP + C series applied to neighbouring machines; however, the precise relationship between *Werknummer* and *Stammkennzeichen* is unknown. SP + CW which is mentioned in ULTRA decrypt CX/MSS/R.309(A) is almost certainly *Werknummer* 211118.
- It is thought that the *Stammkennzeichen* series GM + R applied to the He 219 A-2. A report of 13 September 1944 from L/NJG 1 advised that GM + RB and GM + RD were “in the process of being delivered” (ULTRA decrypt CX/MSS/R309[A]). The date of this report is consistent with the delivery of early A-2 machines; however, it is unclear if it relates to deliveries from Rostock-Marienehe (*W*Nr.290001 onwards) or from Schwechat (*W*Nr.420319 onwards).
- The *Stammkennzeichen* which applied to this batch of 25 machines was almost certainly CS + Q (A to Y). CS + QG is firmly linked to *W*Nr.290060 (one of three He 219s taken to the USA in July 1945). CS + QI reported 9 December 1944 in braking-propeller trials. CS + QK reported *Flugbuch* Oskar Huber at *E-Stelle* Rechlin 30 December 1944. CS + QP, CS + QQ and CS + QV reported *Flugbuch* Adibert Braun, September and October 1944. CS + QX reportedly at *E-Stelle* Rechlin 7 February 1945.
- The *Stammkennzeichen* which applied to this batch of 20 machines was almost certainly GI + K (A to T, incl.). GI + KQ is firmly linked to *W*Nr.290202. *Flugbuch* entry 21 November 1944 by Adibert Braun incorrectly logs GI + KB as CI + KB.

## Appendix 4 – He 219 *Werknummern* and *Stammkennzeichen*

| <i>Werknummer</i> | <i>Stammkennzeichen</i> | <i>Werknummer</i> | <i>Stammkennzeichen</i> | <i>Werknummer</i> | <i>Stammkennzeichen</i> | <i>Werknummer</i> | <i>Stammkennzeichen</i> |
|-------------------|-------------------------|-------------------|-------------------------|-------------------|-------------------------|-------------------|-------------------------|
| 290001            | See Note 5              | 290116            | Unknown                 | 310188            | KO + HR                 | 310319            | Unknown                 |
| 290002            |                         | 290117            |                         | 310189            | KO + HS                 | 310320            |                         |
| 290003            |                         | 290118            |                         | 310190            | KO + HT                 | 310321            |                         |
| 290004            |                         | 290119            |                         | 310191            | KO + HU                 | 310322            |                         |
| 290005            |                         | 290120            |                         | 310192            | KO + HV                 | 310323            |                         |
| 290006            |                         | 290121            |                         | 310193            | KO + HW                 | 310324            |                         |
| 290007            |                         | 290122            |                         | 310194            | KO + HX                 | 310325            |                         |
| 290008            |                         | 290123            |                         | 310195            | KZ + UA                 | 310326            |                         |
| 290009            |                         | 290124            |                         | 310196            | KZ + UB                 | 310327            |                         |
| 290010            |                         | 290125            |                         | 310197            | KZ + UC                 | 310328            |                         |
| 290011            |                         | 290126            | 310198                  | KZ + UD           | 310329                  |                   |                         |
| 290012            |                         | 290127            | 310199                  | KZ + UE           | 310330                  |                   |                         |
| 290013            |                         | 290128            | 310200                  | KZ + UF           | 310331                  |                   |                         |
| 290014            |                         | 290129            | 310201                  | KZ + UG           | 310332                  |                   |                         |
| 290015            |                         | 290186            | 310202                  | KZ + UH           | 310333                  |                   |                         |
| 290016            |                         | 290187            | 310203                  | KZ + UI           | 310334                  |                   |                         |
| 290017            |                         | 290188            | 310204                  | KZ + UJ           | 310335                  |                   |                         |
| 290018            |                         | 290189            | 310205                  | KZ + UK           | 310336                  |                   |                         |
| 290019            |                         | 290190            | 310206                  | KZ + UL           | 310337                  |                   |                         |
| 290020            |                         | 290191            | 310207                  | KZ + UM           | 310338                  |                   |                         |
| 290054            | See Note 6              | 290192            | See Note 7              | 310208            | KZ + UN                 | 310339            |                         |
| 290055            |                         | 290193            |                         | 310209            | KZ + UO                 | 310340            |                         |
| 290056            |                         | 290194            |                         | 310210            | KZ + UP                 | 310341            |                         |
| 290057            |                         | 290195            |                         | 310211            | See Note 8              | 310342            |                         |
| 290058            |                         | 290196            |                         | 310212            |                         | 310343            |                         |
| 290059            |                         | 290197            |                         | 310213            |                         | 310344            |                         |
| 290060            |                         | CS + QG           |                         | 290198            | 310214                  | 310345            |                         |
| 290061            | See Note 6              | 290199            | 310215                  | 310346            |                         |                   |                         |
| 290062            |                         | 290200            | 310216                  | 310347            |                         |                   |                         |
| 290063            |                         | 290201            | 310217                  | 310348            |                         |                   |                         |
| 290064            |                         | 290202            | GI + KQ                 | 310218            | 310349                  |                   |                         |
| 290065            |                         | 290203            | See Note 7              | 310219            | 310350                  |                   |                         |
| 290066            |                         | 290204            |                         | 310220            | 420319                  |                   |                         |
| 290067            |                         | 290205            | 310221                  | 420320            |                         |                   |                         |
| 290068            |                         | 310106            | 310222                  | 420321            |                         |                   |                         |
| 290069            |                         | 310107            | 310223                  | 420322            |                         |                   |                         |
| 290070            |                         | 310108            | 310224                  | 420323            |                         |                   |                         |
| 290071            |                         | 310109            | 310225                  | 420324            |                         |                   |                         |
| 290072            |                         | 310110            | 310226                  | 420325            |                         |                   |                         |
| 290073            |                         | 310111            | 310227                  | 420326            |                         |                   |                         |
| 290074            |                         | 310112            | 310228                  | 420327            |                         |                   |                         |
| 290075            |                         | 310113            | 310229                  | 420328            |                         |                   |                         |
| 290076            |                         | 310114            | 310230                  | 420329            |                         |                   |                         |
| 290077            |                         | 310115            | 310311                  | 420330            |                         |                   |                         |
| 290078            | 310181                  | 310312            | 420331                  |                   |                         |                   |                         |
| 290110            | 310182                  | 310313            | 420332                  |                   |                         |                   |                         |
| 290111            | 310183                  | 310314            | 420333                  |                   |                         |                   |                         |
| 290112            | 310184                  | 310315            | 420371                  |                   |                         |                   |                         |
| 290113            | 310185                  | 310316            | 420372                  |                   |                         |                   |                         |
| 290114            | 310186                  | 310317            | 420373                  |                   |                         |                   |                         |
| 290115            | 310187                  | 310318            | 420374                  |                   |                         |                   |                         |
|                   |                         |                   | 420375                  |                   |                         |                   |                         |

### Notes:

- The *Stammkennzeichen* series KZ + U almost certainly extended past KZ + UP, to at least KZ + UT.
- For *Werknummern* 310106 to 310209 the link with *Stammkennzeichen* can only be an informed best estimate, based on primary source material. Only two *Stammkennzeichen* series are known for the He 219 A-7 variant: KO + H which was immediately followed by KZ + U. Several *Flugbuch* entries show a 'hybridized' prefix of KZ + H. KZ + UP appears ULTRA decrypt CX/MSS/R.454/A/22 where it is linked with *W*Nr.310210. It is also clear that KZ + UH is *W*Nr.310202 which was delivered to Ludwigslust on 3 February 1945 and destroyed in an air-raid on the same day.
- Some publications (at least since 1970) have reported the *Stammkennzeichen* GE + FN, DN + AN, KJ + BB and KZ + RZ as being applicable to the He 219. GE + FN is bogus; DN + AN almost certainly applies to the Junkers Ju 87; KJ + BB applies to Bf 109 G-2 *W*Nr.10606, and no evidence has been found for KZ + RZ. Several *Flugbuch* entries are incorrect (see examples Notes 7 and 9). The British FIU Report of August 1945 also includes two *Stammkennzeichen* errors: RL + AK is misreported as BL + AK, and BE + JF misreported as BF + JF. Also, a May 1944 flight report by *Hptm.* Martin Lütke of *NJGr.*10 misreported DV + DB as DB + DT.