## AIRCRAFT TRADE

 INTRODUCTORYThis trade comprises firms that were engaged wholly or mainly in the construction of aircraft and parts thereof, including engines.

Table I A.-General summary

| Particulars |  |  | 1935 | 1934 | 1933 | 1930 |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |

* Not available.

Table I B.-Firms employing not more than ten persons on the average

| $c$ | Particulars |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: |

At each Census returns were received from all firms to whom schedules were sent. At the I924 Census all firms that made returns employed more than ten persons.

Table II.-Size of establishments in 1935


Table III.-Particulars of output, etc., in each of the principal areas of the United Kingdom

| Area* |  | Gross output | Net output | Number of persons employed | Net output per person employed |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\text { I } \quad \ldots \quad \ldots\left\{\begin{array}{l} 1935 \\ 1930 \end{array}\right.$ | $\begin{gathered} \text { No. } \\ 23 \\ 18 \end{gathered}$ | $\begin{gathered} \text { £'000 } \\ 5,038 \\ 3,965 \end{gathered}$ | $\begin{gathered} £^{\prime} 000 \\ 2,916 \\ 2,65 I \end{gathered}$ | $\begin{gathered} \text { No. } \\ \text { 13,030 } \\ 9,878 \end{gathered}$ | $\begin{gathered} \underset{224}{£} \\ 268 \end{gathered}$ |
| $\begin{array}{cccc}8 & \ldots & \ldots & 1935 \\ \text { 10 } & \ldots & \ldots & \text { 1935 } \\ \text { Other areas } & \ldots & 1935\end{array}$ | $\begin{array}{r} 12 \\ 4 \\ 13 \end{array}$ | $\begin{array}{r} 1,08 \mathrm{I} \\ 723 \\ 7,077 \end{array}$ | $\begin{array}{r} 657 \\ 47 \mathrm{I} \\ 4,408 \end{array}$ | $\begin{array}{r} 4,295 \\ 1,805 \\ 15,902 \end{array}$ | $\begin{aligned} & 153 \\ & 261 \\ & 277 \end{aligned}$ |
| Total ... $\left\{\begin{array}{l}1935 \\ 1930\end{array}\right.$ | $\begin{aligned} & 29 \\ & 20 \end{aligned}$ | $\begin{aligned} & 8,88 \mathrm{I} \\ & 4,7^{23} \end{aligned}$ | $\begin{aligned} & 5,536 \\ & 2,926 \end{aligned}$ | $\begin{aligned} & 22,002 \\ & I T, 444 \end{aligned}$ | $\begin{aligned} & 252 \\ & 256 \end{aligned}$ |
| $\text { Total } \quad \cdots\left\{\begin{array}{l} 1935 \\ 1930 \end{array}\right.$ | $\begin{aligned} & 52 \\ & 38 \end{aligned}$ | 13,919 8,688 | $\begin{aligned} & 8,452 \\ & 5,577 \end{aligned}$ | $\begin{aligned} & 35,032 \\ & 21,322 \end{aligned}$ | $\begin{aligned} & 241 \\ & 262 \end{aligned}$ |
| * For particulars see page xviii. <br> $\dagger$ Number of returns for 1930. |  |  |  |  |  |

Table IV.-No sub-divisions of this trade have been distinguished.
PRODUCTION
Table V.-Output of principal products

| Kind of output | 1935 |  |  | 1934 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Value | Entries | Quantity | Value |
| Aeroplanes, complete :With engines fitted Without engines ... | No. | $t^{\prime} \mathrm{ooo}$ | No. | No. | $£{ }^{\prime} 000$ |
|  | 644 | 1,275 | 15 | 396 | 1,074 |
|  | 1,163 | 3,327 | 18 | 712 | 2,012 |
|  | 1,807 | 4,602 | $\ldots$ | 1,108 | 3,086 |
| Engines for aircraft :- <br> Complete <br> Parts <br> Other parts of aircraft <br> Other principal products, including parachutes <br> Repair work, etc. (including development and experimental work) | 3,030 | 3,918 | 8 | 1,685 | 2,357 |
|  | 3,030 | 897 | 21 | 1,68 | 748 |
|  | ... | 2,224 | 66 | ... | 1,676 |
|  |  | 270 | 16 | ... | 115 |
|  | $\ldots$ | 1,075* | 45 | ... | $75^{*}$ |
| Total-Principal products | $\ldots$ | 12,986 | $\ldots$ | $\ldots$ | 8,732 |
| Work in progress :Addition on account of work in progress at the end of the year Deduction on account of work in progress at the beginning of the year |  |  |  |  |  |
|  | ... | 4,047 | 44 | $\ldots$ | 2,564 |
|  | ... | 2,748 | 42 | ... | 1,999 |
| Total ... ... ... ... | $\ldots$ | 14,285 | $\ldots$ | ... | 9,297 |
| * Amount received. |  |  |  |  |  |
| $\bigcirc$ |  |  |  |  | $\mathrm{O}_{4}$ |

The figures shown in the preceding table include the following output recorded by firms whose returns were made on schedules for other trades and are not, therefore, included in Table I A.

| Kind of output | 1935 |  |  | 1934 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Value | Entries | Quantity | Value |
| Engines for aircraft :Complete ... <br> Parts <br> Other parts of aircraft <br> Other principal products, including parachutes <br> Repair work... | No. | $£^{\prime} 000$ | No. | No. | $£^{\prime} 000$ |
|  | 22 | 12 | 1 | II | 6 |
|  | ... | 89 | 13 |  | 58 |
|  | ... | 371 | 35 | $\ldots$ | 340 |
|  | $\ldots$ | 40 | 8 | $\ldots$ | ıо |
|  | ... | I* | I | - |  |
| Total ... ... ... | ... | 513 | $\ldots$ | $\ldots$ | $4^{14}$ |

Table VI.-Average values of goods produced, exported and imported

| Kind of goods | Production (at factory) |  |  | Exports (f.o.b.) |  | Imports (c.i.f.) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Average value |  | $\left\|\begin{array}{c} 1935 \\ \text { as a } \\ \text { per- } \\ \text { centage } \\ \text { of } 1934 \end{array}\right\|$ | Average value |  | Average value |  |
|  | 1935 | 1934 |  | 1935 | 1934 | 1935 | 1934 |
|  | $\stackrel{t}{\text { each }}$ | $\underset{\text { each }}{f}$ | Per cent. | $\underset{\text { each }}{\stackrel{t}{2}}$ | $\stackrel{\text { each }}{\text { ¢ }}$ | $\stackrel{\text { each }}{\text { e }}$ | $\stackrel{\text { each }}{\text { f }}$ |
| Aeroplanes, complete :With engines fitted ... | 1,980 | 2,712 | $73 \cdot 0$ | 2,683 | 2,505 |  |  |
| Without engines ... | 2,860 | 2,825 | IOI $\cdot 2$ | * |  |  |  |
| complete | 1,293 | 1,399 | $92 \cdot 4$ | 1,067 | -1,237 |  |  |

[^0]AIRCRAFT
Table VII.-Volume of Production, 1924-1935

| Kind of output | Total production |  |  | Production index$(1935=100)$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { 1935 } \\ \text { as } \\ \text { returned } \end{gathered}$ | 1934 |  | 1924 | 1930 | 1933 | 1934 |
|  |  | As returned | At 1935 average values |  |  |  |  |
| Aeroplanes, complete | £'ooo <br> 4,602 | ¢'000 3,086 | $£^{\prime} 000$ <br> 2,822 | Per cent. 27 | Per cent. 79 | $\begin{gathered} \text { Per } \\ \text { cent. } \\ 60 \end{gathered}$ | Per cent. 61 |
| Engines for aircraft :- |  |  |  |  |  |  |  |
| Complete ... | 3,918 | 2,357 | 2,178 | 30 | 66 | 48 | 56 |
| Parts ... ... ... | 897 | 748 | 691 | \} 88 | 68 | 64 | 77 |
| Other parts of aircraft ... | 2,224 | 1,676 | 1,541 | $\}^{18}\{$ | 63 | 61 | 69 |
| Other principal products, including parachutes... | 270 | 115 | 106 | 1 | 14 | 14 | 39 |
| Repair work ... ... | 1,075 | $75^{\circ}$ | 720 | 33 | 89 | 63 | 67 |
| Addition on account of work in progress | 1,299 | 565 | 519 |  |  |  |  |
| Total | 14,285 | 9,297 | 8,577 | 23 | 65 | 51 | 60 |

Table VIII.-Production in relation to Exports and Imports

| Kind of goods | Production | Exports | Proportion of production exported | Retained imports | Available for use in the United Kingdom | Share of home market held by British goods |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | Per cent. | No. | No. | Per cent. |
| Aeroplanes, com- 1935 | r,807* |  |  | 20 |  |  |
| $\left.\begin{array}{l}\text { plete, with en- } \\ \text { gines fitted }\end{array}\right\}$ I934 | 1,108* | 298 |  | 3 | $\ldots$ | $\ldots$ |
| Engines for air- 1935 |  | 652 | $2 \mathrm{I} \cdot 5$ | 11 | 2,389 | $99 \cdot 5$ |
| craft, complete $\{1934$ | I,685 | 479 | $28 \cdot 4$ | 8 | 1,214 | $99 \cdot 3$ |

* Including aeroplanes without engines.

Table IX.-Other output of the Aircraft Trade
The value of the gross output of the firms whose returns were made on schedules for the Aircraft Trade was $£ 13,919,000$ in 1935 and $£ 8,963,000$ in 1934, of which $£ 13,772,000$ in 1935 and $£ 8,883,000$ in 1934 consisted of products included in Table V. Particulars of the remaining items are shown below.


MATERIALS AND FUEL
Table X A.-Materials, fuel and electricity purchased and used

| Kind of materials, etc. | 1935 |  | $1934$ <br> Cost |
| :---: | :---: | :---: | :---: |
|  | Quantity | Cost |  |
| Materials used :- <br> Aeroplane engines <br> Steel bars and rods <br> Steel sheets <br> Steel tubes <br> Steel forgings ... <br> Steel wire and cable <br> Aluminium and aluminium alloys, in all forms <br> Copper, brass and other alloys of copper, in all forms <br> Linen piece-goods <br> Unclassified materials <br> Fuel and electricity used for all purposes :Coal <br> Coke <br> Heàvy fuel oil $\qquad$ $\qquad$ <br> Purchased electricity $\dagger$.. <br> All other purchased materials and fuel... | No. 398 Th. tons $2 \cdot 7$ $\ldots$. $0 \cdot 9$ $\ldots \cdot 5$ 0.5 $\ldots \cdot 6$ $\ldots$. $0 \cdot 2$ $\ldots$ $2 \cdot 1$ $0 \cdot 4$ Th. sq. yds. $787 \cdot 1$ $\ldots$ $\cdots$ Th. tons $24 \cdot I$ $8 \cdot 6$ Th. galls. I.524 Th. B.T.U. (Kw.-hrs.) 37.369 $\cdots$ |  | £'000 |
| Total ... ... ... |  | 5,197 | 3,073 |

$\dagger$ Including electricity generated in other works under the same ownership

Table X B.-Consumption of coal, coke and electricity in 1935 and 1930


## EMPLOYMENT

Table XI A.-Average numbers employed in 1935 and 1934

| Persons employed | Males |  | Females |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Under } \\ & \text { I8 } \end{aligned}$ | $\begin{aligned} & \text { All } \\ & \text { ages } \end{aligned}$ | $\begin{gathered} \text { Under } \\ \text { I } 8 \end{gathered}$ | $\begin{aligned} & \text { All } \\ & \text { ages } \end{aligned}$ | $\begin{aligned} & \text { Under } \\ & \text { i } 8 \end{aligned}$ | $\begin{aligned} & \text { All } \\ & \text { ages } \end{aligned}$ |
|  | 3,126 | 27,469 | 270 | 1,674 | 3,396 | 29, 143 |
|  | 1,869 | 18,437 | 164 | I,06I | 2,033 |  |
|  | 417 | 4,674 | 261 | 1,215 | 678 | 5,889 |
|  | 248 | 3,364 | 147 | 913 | 395 | 4,277 |
| Total ... ... $\left\{\begin{array}{l}1935 \\ \text { I934 }\end{array}\right.$ | 3,543 | 32,143 | 531 | 2,889 | 4,074 | 35,032 |
|  | 2,II7 | 21,80I | 3 II | 1,974 | 2,428 | 23,775 |

* As at 12th October, 1935, and 13th October, 1934.

Table XI B.-Operatives employed in one week in each month of 1934 and 1395 by firms furnishing returns in respect of the twelve months ended December


* For the ending date of each week see page xiv.
$\dagger$ Based on the estimated average for the year 1935

Table XI C.-Average numbers employed, 1924-1935

| Year |  |  |  |  | Operatives | Administrative technical and clerical staff | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1924 | ... | $\ldots$ | $\ldots$ | $\ldots$ | 10,002 | 1,733 | 11,735 |
| 1930 | $\ldots$ | $\ldots$ | ... | ... | 17,595 | 3,727 | 21,322 20,401 |
| 1933 | $\ldots$ | $\ldots$ | ... | $\ldots$ | 16,660 | 3,741 | 20,401 |
| 1934 | $\ldots$ | $\cdots$ | $\ldots$ | $\ldots$ | 19,498 29,143 | 4,277 5,889 | 23,775 35,032 |
| 1935 | $\ldots$ | ... | $\ldots$ | $\ldots$ | 29,143 | 5,889 |  |

## WAGES

Table XII.-Wages paid by firms furnishing returns of wages in 1935 and 1930

The aggregate amount of wages paid by firms furnishing returns of wages was $£ 4,169,000$ in 1935 representing $5 \mathrm{I} \cdot 5$ per cent. of the net output of these firms, the corresponding figures for 1930 being $£ \mathrm{I}, 562,000$ and $47 \cdot 2$ per cent. The figures for these firms given below indicate the size of the sample and the extent to which it is representative.

| Firms furnishing returns of wages | 1935 |  | 1930 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Aggregate | Proportion of trade | Aggregate | Proportion of trade |
| Gross output.. Net output | $\begin{gathered} \text { £'000 } \\ 13,183 \\ 8,099 \end{gathered}$ | $\begin{gathered} \text { Per cent. } \\ 94 \cdot 7 \\ 95 \cdot 8 \end{gathered}$ | $\begin{gathered} £^{\prime} 000 \\ 5,246 \\ 3,312 \end{gathered}$ | $\begin{gathered} \text { Per cent. } \\ 60 \cdot 4 \\ 59 \cdot 4 \end{gathered}$ |
| Operative staff employed :During mid-week of October :- | No. |  | No. |  |
| Males <br> Females | $\begin{array}{r} 26,532 \\ 1,594 \end{array}$ | $94 \cdot \mathrm{I}$ $92 \cdot 8$ | \}** | * |
| Total | 28,126 | 94.1 | 10,697 | $59 \cdot 9$ |
| Average for the year | 27,311 | $93 \cdot 7$ | 10,319 | $58 \cdot 6$ |
| Administrative, technical and clerical staff <br> Number of establishments .. | $\begin{array}{r} 5,362 \\ 32 \end{array}$ | $\begin{aligned} & 9 I \cdot I \\ & 6 I \cdot 5 \end{aligned}$ | * |  |

[^1]
## COUNTRY TABLES (1935)

Note.-The figures given in the following tables relate only to firms whose returns were made on schedules for the Aircraft Trade. Owing to the possible disclosure of information relating to individual firms, separate particulars for England and Wales and for Scotland cannot be given.

No production was recorded for Northern Ireland.
Table I.-General summary (see page 404)

| Kind of output | Great Britain |  |
| :---: | :---: | :---: |
|  | Quantity | Value |
|  | No. | $\chi^{\prime}$ '000 |
| Aeroplanes complete :With engines fitted | 644 | 1,275 |
| Without engines | r,163 | 3,327 |
| Total | 1,807 | 4,602 |
| Engines for aircraft :- |  |  |
| $\begin{array}{ccccccc}\text { Complete... } & \ldots & \ldots & \ldots & \ldots & \ldots & \ldots \\ \text { Parts } & \ldots & \ldots & \ldots & \ldots & \ldots & \ldots \\ \ldots\end{array}$ | 3,008 | 3,906 808 |
| Other parts of aircraft ... ... ... ... | ... | 1,853 |
| Other principal products, including parachutes |  | 230 |
| Manufactures of metal ... ... ... ... ... ... | $\ldots$ | 137 |
| Other goods made $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | $\ldots$ | Io |
| Repair work, etc. (including development and experimental work) | .. | 1,074* |
| Work in progress :- |  |  |
| Addition on account of work in progress at the end of the year | $\ldots$ | 4,047 |
| Deduction on account of work in progress at the beginning of the year | $\ldots$ | 2,748 |
| Total ... | ... | 13,919 |

* Amount received.

Table III A.-Materials, fuel and electricity purchased and used (see page 408)

Table III B.-Consumption of electricity (see page 408)
Table IV A.-Numbers employed in week ended 12th October, 1935

| Persons employed | Males |  | Females |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Under } \\ \text { I } 8 \end{gathered}$ | All <br> ages | $\begin{aligned} & \text { Under } \\ & \text { I } \end{aligned}$ | $\begin{aligned} & \text { All } \\ & \text { ages } \end{aligned}$ | $\begin{aligned} & \text { Under } \\ & \text { I8 } \end{aligned}$ | All ages |
| Great Britain :Operatives | 3,207 | 28,183 | 277 | 1,717 | 3,484 | 29,900 |
| Administrative, technical and clerical staff... | 417 | 4,674 | 261 | 1,215 | 678 | 5,889 |
| Total | 3,624 | 32,857 | 538 | 2,932 | 4,162 | 35,789 |

Table IV B.-Operatives employed in one week in each month of 1935


Table V.-Firms employing not more than ten persons on the average (see page 404)


[^0]:    * Not recorded separately.

[^1]:    * Not recorded separately

