Part 2: RAF Expansion

2.1 Introduction

This section looks at the political events in Europe and the Air Ministry expansion schemes that resulted in airfield development in Norfolk and Suffolk. It is largely based on AP3397, the Air Historical Branch narrative titled 'Maintenance', published in 1954 by the Air Ministry.

2.2 Background

By the end of 1932 Germany had commenced to re-arm; Hitler became Chancellor on 1 February 1933 and in the next few years equipped an air force of major proportions. In an attempt to achieve parity with Germany's increasing air strength, the British (National) Government introduced a number of schemes (A-M) for the expansion of the RAF, which followed in quick succession between 1934 and 1939. Five schemes were passed by the Cabinet: 'A', 'C', 'F' 'L' and 'M'. Another three 'H', 'J' and 'K' were formulated but never went beyond the proposal stage although many new RAF stations proposed under these schemes did become part of the next scheme to be passed by the Cabinet. Schemes 'B', 'D', 'E' and 'G' never reached the point of formal submission. This expansion through the successful schemes, led to a large-scale rebuilding programme with existing stations being modernised in keeping with numerous new RAF aerodromes then being constructed between 1934 and 1940.

From 26 May 1934, the selection of airfields was the responsibility of the Works Directorate Aerodromes Board, and their suitability from a civil engineering aspect was investigated by the other specialist departments within the Works Directorate. A works report, which covered all aspects of airfield preparation and layout, was prepared for each station. From this, suitability of the proposed airfield was finally decided upon, requisition papers issued, detailed site plans prepared, as well as airfield grading plans and services were subsequently formulated and contracts let.

2.2.1 Scheme 'A'

This first scheme, adopted in July 1934, called for a front-line strength of 1,544 aircraft (within five years) of which 1,252 were for home defence. The ADGB air-fighting zone of the old 52-squadron scheme was expanded from Gosport in the south to Usworth in the north, so that for the first time since 1918, fighter squadrons were again based in the north-east. New permanent RAF aerodromes in Norfolk / Suffolk planned in 1934 for construction in 1935 were:

Marham Feltwell Stradishall.

(note that Marham was the first to be constructed in the UK followed by Feltwell.)

2.2.2 Scheme 'C'

Scheme 'C' replaced Scheme 'A' when the size of Germany's air force became known in 1935, and came about as a result of Hitler personally stating to Sir John Simon and Anthony Eden in March 1935 that the German Air Force had already reached parity with the RAF. Scheme 'C' was implemented on 22 May 1935 to provide a Metropolitan Air Force of 123 squadrons with 1,500 aircraft within two years. No new permanent RAF aerodromes were constructed in Norfolk / Suffolk to Scheme 'C', although existing stations such as Bircham Newton and Martlesham Heath may have been expanded under this scheme.

2.2.3 Scheme 'F'

Scheme 'F' came about due to further German expansion and proposed a programme of 2,500 first-line aircraft by March 1939. Another reason was the outbreak of the Abyssinian War. It was approved in February 1936, replacing Scheme 'C' before it was completed and allowed for 124 squadrons with 1,750 front-line aircraft. The programme of aircraft construction of the previous schemes was not beyond the capacity of the firms existing in the industry. Scheme 'F' was however, too large for these firms to undertake unaided. It was therefore, decided to bring into operation a number of 'shadow factories'.

The factories in question were the large motor car plants in the Birmingham and Coventry districts where new facilities were to be erected in close proximity to the parent works (hence the term shadow factory). Later the scheme was expanded to Blackpool, Manchester and Liverpool. To cope with the increase in output from these factories, provision had to be made for the aircraft to be held in reserve. This directly led to the setting up of Aircraft Storage Units (ASUs) on many of the new Flying Training Schools.

By the end of the year, Scheme 'H' was proposed which would have increased the front-line strength at the expense of the reserves but was soon rejected. Construction then began of the first ASUs.

In 1937 other new permanent RAF stations were planned under this scheme in Norfolk / Suffolk:

Honington Wattisham Watton West Raynham.

Between 1 May and 10 July 1936, the Air Council reviewed the system of command and administration prevailing in Home Commands. As a result ADGB, with its three sub-ordinates, (Western, Central and Fighting Areas), plus No.1 Air Defence Group, Coastal Area and Inland Area, were all disbanded. Instead, the first four new commands, each with an Air Officer Commanding-in-Chief were formed:

- Training Command formed out of the old Inland Area on 1 May 1936 to control all training units at home including the RAF Reserve and Inspector of Civil Schools. Headquarters established at Buntingsdale Hall, Market Drayton
- Bomber Command formed on 10 July 1936 controlling bomber squadrons and organised under a number of groups. Headquarters established at Hillingdon House, Uxbridge
- Fighter Command formed on 10 July 1936 controlling fighter squadrons under a number of groups, Army Co-operation squadrons and the Royal Observer Corps. Headquarters established at Stanmore Park, London
- Coastal Command formed out of the old Coastal Area on 10 July 1936 controlling flying boats and general reconnaissance squadrons, administration and shore training of the squadrons of Fleet Air Arm. Headquarters established at Lee-on-Solent.

2.2.4 Schemes 'L' and 'M'

Scheme 'J' would have given the RAF, by the summer of 1941, nearly 2,400 first-line aircraft, including 900 heavy bombers, but this would have entailed considerable financial expenditure which was unacceptable to the Government, who instructed the Air Ministry to prepare a cheaper version, which became Scheme 'K'.

Scheme 'K' came before the Cabinet in March 1938, but by this time the German move into Austria had occurred and it therefore became necessary for an accelerated programme. Scheme 'L' was the result, passed by the Cabinet on 27 April 1938 and this involved a programme of aircraft construction which represented the maximum output from industry within a two year period. However, long before the first year had passed, came the Munich crises and Scheme 'L' was replaced by Scheme 'M'. The latter was approved on 7 November 1938 for 2,550 first-line aircraft in the Metropolitan Air Force and scheduled to be completed by 31 March 1942.

There was only one new permanent Scheme 'M' station in the Norfolk / Suffolk region, at Swanton Morley. New nation-wide permanent RAF operational stations planned under Scheme 'L' are listed in Table 1 in Part 4 (p.40) which identifies 55 aircraft sheds on 13 sites. The protected version of the type 'C' hangar was also built on non-operational aircraft storage units and these figures have to be added to the list.

2.3 2013 Status

The situation in 2013, as regards the Scheme 'L' operational stations, is that out of 13 sites, only three are still RAF stations, another two are army barracks, three are civil airports and the rest are disused. Bramcote has lost all of its hangars and so has St Eval, while Wick has lost three of four and Kirton-in-Lindsey is under threat. This leaves 41 hangars extant (44 if you include Kirton-in-Lindsey).

Note that technically, the 'hangars' are aircraft sheds but for ease of reading 'hangars' is used throughout.