British equipment losses at Dunkirk and the post Dunkirk situation

The Dunkirk evacuation represented massive losses in materials and equipment for the British army. In this article we are going to take a look at the amount of equipment that was left in France, the amount of equipment remaining in the United Kingdom and the ability of the United Kingdoms industry to replace the losses suffered.

Below is a list of the artillery lost in France.

Field	Anti-Tank	Medium Artillery	Heavy Artillery	Supe
25/18pdr	18pdr	4.5" How	2pdr	
704	216	96	509	

Tank losses in France.

	Light Light VI	Matilda	Matilda II	Cruiser
Total	331	77	23	184

It's clear to see that the amount of material lost was significant, particularly that of anti-tank and medium/field artillery. The total number of tanks lost seems high but, fortunately for Britain the majority of these were obsolete light tanks and the older Matilda I infantry tanks. The number of Cruiser tanks lost was however quite significant, representing more than half of the total number of Cruiser tanks available. I have as yet not been able to locate figures for anti-aircraft losses but I suspect they would be relatively light as the number of weapons sent to France was quite small.

While the total amount of equipment lost is interesting, it does not give a good indication of the situation Britain was faced with after the fall of France. The able below shows the stock of equipment in the hands of the Army on June 6th 1940 compared to the losses in France.

Lo	st Stock 6th Jur % Lo	ost	
2pdr Equipments	509	333	60
Bofors Equipments	-	283	-
3.7" Equipments	-	662	-
18/25pdr Equipments	704	492	59
25pdr Equipments	0	114	0

British Equipment losses at Dunkirk and the situation post Dunkirk

Written by David Boyd Sunday, 04 January 2009 14:28 - Last Updated Sunday, 04 January 2009 14:30

18pdr Equipments	216	180	55
4.5" How Equipments	94	280	25
Cruiser Tanks	184	141	57
Infantry Tanks	100	140	42
Light Tanks	331	407	45
Rifles	-	1,150,000	-
Bren Guns	-	14,023	-
Boys Anti-Tank	-	6,675	-
2" Mortar	-	3,100	-
3" Mortar	-	261	-

Overall artillery and anti-tank losses are in the region of 60% of total stocks and tanks around 50% of total stock. Before we continue, it is important to look at the situation the United Kingdom and the British Army was in. The British Army before the war was a small, professional force but as the probability of conflict increased the size of the British Army was rapidly increased and so did the need to modern equipment. The War Office requirements for equipment until 1939 was around 5 field divisions, by February 1939 this had increased to 10 divisions and by September the requirement was for 20 divisions with "55 as soon as possible".

The United Kingdoms industry was not war ready at the outbreak of war and had no hope of equipping the rapidly expanding army let alone the 55 division requirement set by the War Office. As the war progressed and the United Kingdom's industries where switched over to the production of the weapons of war, the increase in munitions was rapid and by June 1940 production was more than double that of the average of the first 6 months of war. Table comparing output of tanks, weapons and ammunition in September 1939 and June 1940

	Production \$	September 1939	June 1940
	Light Tanks	26	21
	Cruiser Tanks	21	58
	Infantry Tanks	7	57
	Bren Guns	1,694	3,447
	25pdr Equipments	0	102
Во	fors AA Equipme	nts 2	118
3	.7" AA Equipment	s 56	122
	2pdr Equipments	47	83
	25pdr HE	77,500	293,000
	2pdr AP	29,500	84,500
	.303"□	14.5m	69m

Despite the increases in output the losses in France meant a massive setback in the equipping of the new British army. It is common to read the statement "the statement "there were fewer than 100 tanks left in the United Kingdom

Written by David Boyd Sunday, 04 January 2009 14:28 - Last Updated Sunday, 04 January 2009 14:30

The following table shows the percentage of the 27 "token" divisions in the United Kingdom that could be equipped with army stocks within the UK, June 30th 1940. The equipment for these 27 "token" divisions includes all the equipment for 27 Infantry Divisions, 2 Armoured Divisions, 7 Army Tank Brigades, 11 Divisional Cavalry Regiments and all equipment for the Air Defence of Great Britain. Note, a the equipment requirement of a token division includes all the initial equipment of an infantry division, its share of equipment from the armoured divisions, all equipment from non divisional troops and reserves. For example a regular infantry division required around 740 Bren guns while a "token" division requires 1,171.

June 30th 1940/b>

% of 27 Divisions mber of divisions

Anti-tank rifles	40%	13
Bren Guns	40%	14
2" Mortars	80%	24
3" Mortars	20%	5.4
2pdr AT	16%	4.5
Field Artillery	43%	15
Medium Artillery	26%	10
Heavy Artillery	44%	12
Medium A.A.	24%	6.5(est)
Heavy A.A.	59%	16(est)

This data shows that there is enough equipment in the United Kingdom to fully equip around 10-12 divisions with artillery and small arms (there are more than enough rifles to equip the full 27). It is clear from the table that the most serious situation is that of anti-tank weapons, with only enough 2pdrs to fully equip just over 4 divisions. The following table shows the increase in equipment from June to August 1940, large amounts of equipment were sent to the Middle East and these have been included in the final column.

	June 3	0th	July 31st	August 31st (ME)		
Anti-tank	rifles		40%	51%	55%	
Bren G	iuns		40%	53%	59%	
2" Mor	tars		80%	87%	91%	

[&]quot;, this is obviously an exaggeration as the two tables above clearly show more than 100 tanks in the hands of the army and Junes production alone was more than 100 tanks. It is also often said that there was only a single fully equipped division in the United Kingdom, this may have been the case, but how many divisions worth of equipment were available in total?

British Equipment losses at Dunkirk and the situation post Dunkirk

Written by David Boyd Sunday, 04 January 2009 14:28 - Last Updated Sunday, 04 January 2009 14:30

3" Mortars	20%	35%	35%	
2pdr AT	16%	23%	24%	
Field Artillery	43%	49%	51%	
Medium Artillery	26%	27%	30%	
Heavy Artillery	44%	-	-	
Medium A.A.	24%	29%	33%	
Heavy A.A.	59%	62%	65%	

By the end of August the situation has greatly improved from that of June 30th with infantry weapons seeing the greatest increase. Artillery and Anti-Aircraft weapons are also progressing slowly, the anti-tank situation is still critical but is being resolved at an ever increasing rate with 417 2pdr equipments being completed in October/November alone (27.5% of the entire years production). By October 1st the number of "token" divisions that could be equipped were as follows:

	Number of Divisions	Improvement from June 30th
Bren Guns	23.5	9.5
2" Mortars	32	8
3" Mortars	16.5	11.1
2pdr AT	8.5	4
Field Artillery	19	4
Medium Artillery	10	0

The figures clearly show a significant improvement in the number of divisions that can be fully equipped, in terms of light infantry weapons such as mortars, anti-tank rifles and Bren guns the number of extra divisions that could be equipped has risen by at least 10, the greatest improvement being that of 3" mortars. Progress for artillery is slow as 25pdr production is still in the early stages and most of the older 18pdr guns have already been converted. 2pdr anti-tank weapon production is progressing but as mentioned before October and November sees a very large increase over previous months. Medium artillery figures remain static as the new 4.5" and 5.5" guns have not yet entered production.

The following tables detail the total stocks of .303 ammunition held in the United Kingdom, these include stocks for the Army, Air Force and Navy, September 27th 1940.

	Ball	AP	Traced	Total		
June 7th	242.9	29.4	10.3	12.4	0	295
August 30th	386.1	27.5	23.4	11.8	0.46	449.26
September 27th	377.9	28.37	24	11.37	0.44	442.08

British Equipment losses at Dunkirk and the situation post Dunkirk

Written by David Boyd Sunday, 04 January 2009 14:28 - Last Updated Sunday, 04 January 2009 14:30

Weekly output of .303 ammunition of all types for July was around 12.7 million rounds, August 11.2 million rounds and September 8.63 million rounds. Stocks have risen dramatically over the period despite heavy expenditure during over the period of just over 12 million rounds a week. UK production roughly equals expenditure over the period, the increase in stocks is mainly due to imports from Commonwealth sources - 67.7 million rounds in August.

The following shows tanks and carriers in the hands of the army between June 30th and August 31st.

	Infan	try Cruiser	Light	Carriers		
June 30tl	h	140		209	582	
July 31s	t	218		284	657	
August 31	st	274		322	659	

The period between June 30th and August 31st sees an increase of 134 Infantry tanks, 113 Cruiser tanks and 1,542 carriers of all types. Infantry tank production is steadily increasing from 57 in June to 90 in August, Cruiser tank production is decreasing dropping from 58 in June to less than 30 a month by the end of the year. Carrier production has increased dramatically during the year to over 500 a month by May. Infantry tank production peaks in December with 127 tanks in that month alone.