

MEMORANDUM FOR

Subject: German Aviation Gasoline Position

1. Eighty-five per cent of the high octane gasoline for the Luftwaffe was formerly furnished by the German Hydrogenation plants, ten per cent by the Rumanian refineries and five per cent by the German coke industry.

2. After consultation with Dr. Walter E. Levy of O.S.S., who has been responsible for estimates of stock and consumption for the Enemy Oil Committee it appears impossible to make an adequate monthly breakdown of the German aviation gasoline supply and stock position for the following reasons:

a. Hydrogenation plants can vary the type of product made to fit any immediate situation.

b. Our air attacks on synthetic plants have been directed mainly against Hydrogenation plants because of their especial ability to make gasoline and by 1 September had reduced their ability to produce to about twelve per cent of pre-attack capacity. It is not known what part of this twelve per cent can be used for any particular product although it is believed that ^{generally} ~~generally~~ it will be the lower fractions.

c. Before the attacks on German oil industry commenced, it is believed that the German Air Force used between thirty and forty per cent of its total consumption in operational flying (defined as any flying by combat planes in the zone of activity), and the remainder ~~is~~ divided between training, testing, transport and miscellaneous activities. The percentages which the Germans will use at present are subject to wide errors in interpretation, although, in general, it is believed that operational flying, will, of necessity, receive the largest amount.

d. Estimates of the present German oil stock position are the resultant between estimates of production and consumption for each year of war. All errors inherent in these estimates must be increased so greatly when applied to aviation gasoline stocks that no reliance can be placed in such estimates.

e. It is believed that the German oil stocks have been lowered to such a point that on 1 September no more than 600,000 tons of free stocks were left. These must be spread so thinly along the fighting fronts that it can be said that at present German consumption is nearly measured in terms of production. In August, this is estimated to have been 40% of the pre-attack level and in September will reach a figure between twenty-five and thirty per cent.

HEADQUARTERS AAF

ROUTING SLIP

TO → OFFICE & INDIVIDUAL IN TURN		DATE FORWARDED
1.	AFIAN - EU	15 Sep 44
2.		
3.		
4.		
5.		
FOR → FOLLOWING ACTION(S) AS CHECKED		
☐ COORDINATION	☐ NOTE AND RETURN	☐ INFORMATION
☒ NECESSARY ACTION	☐ RECOMMENDATION	☐ FILE
☐ SEE OR PHONE ME	☐ APPROVAL	☐ SIGNATURE
COMMENT		
Refer to comment by Col Burgess Recommend that text and graph (if possible) be kept current. J		
FROM →	OFFICE & INDIVIDUAL	PHONE
	AFIAN	73539

ROUTING SLIP

TO → OFFICE & INDIVIDUAL IN TURN		DATE FORWARDED
1.	Gen H. <i>[Signature]</i>	13 Sept 44
2.	Col <i>[Signature]</i>	
3.	Col - O <i>[Signature]</i>	
4.	AFM - 3 D149	14 Sept 44
5.		

FOR → FOLLOWING ACTION(S) AS CHECKED			
☐ COORDINATION	☐ NOTE AND RETURN	☐ INFORMATION	
☐ NECESSARY ACTION	☐ RECOMMENDATION	☐ FILE	
☐ SEE OR PHONE ME	☐ APPROVAL	☐ SIGNATURE	

COMMENT

~~Have this~~ Have this
kept current

[Signature]

FROM → OFFICE & INDIVIDUAL		PHONE
<i>[Signature]</i>		

SECRET

ADDRESS REPLY TO
COMMANDING GENERAL, ARMY AIR FORCES
WASHINGTON, D. C.

WAR DEPARTMENT
HEADQUARTERS OF THE ARMY AIR FORCES
WASHINGTON, D. C.

SECRET
By Authority of
12 Sept 44
m s.p.

AFIAN-EU

MEMORANDUM FOR ASSISTANT CHIEF OF AIR STAFF, INTELLIGENCE

SUBJECT: Analysis of GAF Gasoline Situation

1. This office was directed to analyze the position of the GAF from the standpoint of gasoline supplies, with the purpose of determining when air attack on oil plants will have a limiting effect on GAF sorties.

2. It is felt that estimates of each of the fundamental factors involve so great a margin of error that the final result would be meaningless. Comments are as follows:

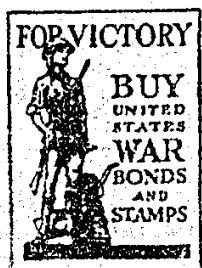
a. Available Supplies - Most of the aviation gasoline comes from synthetic plants which can vary the proportion of aviation gasoline to total output almost at will. The proportion of aviation gasoline output will depend upon the decision of the high command as to relative priority of the GAF and other consumers.

b. Requirements - It appears impossible to make an adequate monthly breakdown of GAF consumption based on sorties or any other index of activity. It is estimated that before the attacks on the German Oil industry began the GAF used from 30% to 40% of its total consumption in operational sorties, the remainder going to training, testing, transport and miscellaneous activities. The estimate of GAF consumption before the oil shortage became acute was subject to a large margin of error, and it is felt that any estimate under present conditions would be subject to a prohibitive error.

c. Stocks - Estimates of German oil stocks are the weakest figures in the analysis of the overall oil position. The errors inherent in the overall stock estimate must be increased greatly when applied to aviation gasoline stocks.

d. The possible cumulative error in working with the above three factors is enormous.

3. Conclusion - It is not possible to make any precise quantitative estimate of the GAF gasoline position. There is ample evidence, however,



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to support the conclusion that the oil shortage has had a limiting effect on GAF activities over recent months.

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MONTHLY RATE

	1943 Average	Estimated Rate for September 1944 as Compared with 1943	Production Available for September 1944
Ground	410,000	274,000	365,000.
Air	200,000	200,000	
Navy	175,000	100,000	
Civilian	536,000	536,000	
TOTAL	1,321,000	1,110,000	

MONTHLY USE IN AREA NOW CONTROLLED BY GERMANY

[illegible]

Based on
Proportional
activity in April

	%	tonnage	consumption per foot in ton	no. of sorties per month	per day
SEF	48%	12,690	.325	75,000	2,500
TEF	18%	4,230	.971	8,750	290
LB B.	15%	15,578	1.914	3,913	130
FB.	7%	2,789	.760	4,605	153
R	12%	14,780	2.370	2,532	84
Total	100%	50,000 50,066		94,650	3,155

CAF Services in April 1944					
	Ward.	Mat.	Junior	Total	Percentage
F	10,470	2,970	6,679	20,119	9,779
L.B.	965	310	3,430	4,705	9,005
F.B.	255	190	1,677	2,122	1,612
R.	580	1345	1,680	3,605	8,543
Total.				30,551	28,939

50.00

W.T. SC: 7E = 19
 11.11 = 14.11
 11.11 = 5.11