LUFTWAFFE ORGANIZED by Robert D. Harmon

Advocated here is a playing aide for antagonists in the LUFTWAFFE game. Mr. Harmon has subdivided the target areas into groups, with capsule commentaries on each areas strengths and weaknesses. We suggest you draw similar boundaries on your target sheets to facilitate quicker decisions in regards to the best defensive placements and bombing allotments for each quarter.

In terms of strategic options, **LUFTWAFFE** is probably the most flexible of all Avalon Hill games to date. The American player has an amazing variety of attacks to choose from; his antagonist must defend the entire board and deploy carefully.

Both sides are confronted by a mapboard bristling with no less than 79 targets, scattered unevenly across the board. To plan his defense, the German player must consider the main routes of approach, the enemy's intentions, and, most important of all, determine what is worth defending. The American must plan his missions according to what is worth attacking, how to keep their formations concentrated as long as possible, and how to attack with the least casualties.

To facilitate planning on both sides, I offer the following system of dividing and analyzing the target cities. As illustrated, the board and the targets have been divided into 15 arbitrary sectors. These sectors consist of discernible groupings of targets, distinct from other areas. These sectors fall into four fronts: Main, Southern, Eastern, and Interior.

MAIN FRONT: Containing most of the targets and airfields, the Main Front is the closest to US bases in England and France. It is the scene of most of the fighting. Its sectors are:

- * Netherlands: 1 target (1 aircraft factory). Amsterdam is usually the first to go. US fighters quickly make the area unusable.
- The Ruhr: 6 targets. Targets here easily reached and eliminated. Airfields as unsafe as Netherlands, but useful if US fighters are not present or used for close escort. No aircraft factories in the area.
- * Rheinland: 10 targets (aircraft factories). Can be eliminated early, but at high cost. Vulnerable and unsafe in 1945.
- Hansa: 6 targets (2 aircraft factories). Western cities open to attack from England: other targets vulnerable to sneak raids. If US bombers can get across Dutch frontier or Baltic coast intact (and they generally can) they'll get their targets. Once all targets in Hansa are gone, German can pull out and centralize his defense.
- ❖ Hesse: 6 targets (2 aircraft factories). Close to the R line but somewhat safe for Germans. The cities will go quickly but the US will face real resistance here heading east. Aggressive US fighter sweeps can dislodge the Germans, but with difficulty.

❖ Franconia: 2 targets (2 aircraft factories). Remote; threatened only by shuttles to and from Italy until 1945. Not vulnerable until 1945.

SOUTHERN FRONT: The US can use his entire capability here, but against fewer and more distant targets than in the Main Front. German is hampered by a lack of airfields. Approachable from Italy, these sectors are:

- Ausland: 7 targets (5 aircraft factories). Somewhat vulnerable. Should be defended as long as possible. Overland shuttles to/from Russia most practicable through here.
- ❖ Linz: 2 targets (1 aircraft factories). Wide open; hard to defend.
- Tyrolia: 7 targets (4 aircraft factories). Defensible until 1945. Of less value than Ausland but better location: Tyrolia is the back door to Germany. Only Southern Front sector with ample airfields.

EASTERN FRONT: More remote than Interior Front but approachable from Russia and the Baltic. An area the US cannot afford to postpone neutralizing until the last moment. This front characterized by small forces and a lack of US fighter strength. Eastern front sectors are:

- ❖ *Pomerania: 3* targets (2 aircraft factories). Open to sneak raids, but can be defended. A good central location for defense of the Baltic coast and interior regions.
- Ostland: 3 targets (1 aircraft factories). Vulnerable to both Russian-based and sneak raiders. Not especially worth defending.
- ❖ Silesia: 3 targets (4 aircraft factories). Remote and isolated, Main threat will come from Russia. Important because of location but not valuable enough to warrant its own air units.

INTERIOR FRONT: These sectors are alike only in that they are the most remote from all routes of approach. The last-ditch fighting will be over this area (if the US has the sense to eliminate the Eastern Front). Sectors:

- ❖ Anhalt: 11 targets (8 aircraft factories). Heart of the aircraft and petroleum industries. Vital and defensible. Anhalt is the scene of the most savage fighting. Best approaches: from England and France, although sneak raids are a faint possibility.
- ❖ Bohemia: 6 targets (3 aircraft factories). Few airfields; incoming bombers must be handled further out. A lack of airfields to the south means the best approach is from Italy, despite the distances involved. Harder to defend than it looks.
- ❖ Tempelhof: 6 targets (4 aircraft factories). Mainly threatened by sneak raiders. Defense should be conducted over Pomerania and Anhalt. Tempelhof can and must be held; it will usually outline even Anhalt.

German defense must consider the routes of approach represented by the Fronts: England/France, Italy, the Baltic, and Russia. The Main Front, with its array of targets and airfields, will be the most often attacked, and the most heavily defended.

One note: although not all versions of the rules (Basic, Tournament, and Advanced) require that all units take off and land in unison, I find it tactically expedient to keep them together and concentrate all of a given type into one or a few local attacks, in other works, hit them with the 'mostest'.

Back to the Main Front; the Me109s can't operate anywhere else. The Main Front has the airfields: the Me109s should be concentrated in Hesse to be in the center of, all of them. The Fw190s, formidable but with almost as short a range, should all be based in Rheinland. There they can assist the 109s or be shuttled to the south if necessary. These aircraft should handle defense of all Main Front sectors; no sector should have its own units. Defense here, as in the other fronts, should be a front-wide operation. If it becomes apparent that one group or more of bombers will get through, the German will have to decide which sector to sacrifice for the sake of the other areas.

Hansa is secondary; most raids will be to the South. To keep the Me109 School Units out of trouble, though, it might be advisable to post them along Hansa's exposed Baltic coast where they can defend or act as a reserve.

In file open spaces of the Southern Front, the German should post his Me110s, Me410s, He219s, and any other twinengine fighters (as needed) in a wide belt extending from Munich to Gyor. If the US comes after Southern Germany in force, the Fw190s can always be called down, otherwise, the twin-engine fighters are suitable. The area is not worth anything else.

Usually the US won't bother to post more than 1 or 2 factors of bombers in Russia, a serious mistake. One Domier group stationed in the Lodz area will adequately defend against this. Most US aircraft will require sending He219s or Me110s to help cover.

ECONOMIC DISTRIBUTING BY SECTORS

LCONOR	TIC DISTR	IDCI	ING DI	BECTORS
Sector	# Targets	Oil	RR	A/C Factories
Anhalt	11	5	2	8
Rheinland	10	1	9	3
Ausland	7	4	0	5
Tyrolia	7	0	0	4
Tempelhof	6	2	1	4
Bohemia	6	2	0	3
Hansa	6	1	0	2
Hesse	6	0	4	2
The Ruhr	6	2	3	0
Silesia	3	0	0	3
Ostland	3	0	1	3
Pomerania	3	0	0	2
Linz	2	0	0	1
Netherlands	1	0	0	1

Aircraft, oil, and railroad targets are, respectively, the most important targets and the only ones directly affecting German tactical strength.

The Baltic is usually the main scene of action on the Eastern Front. Assorted school units and Ju88s will suffice, placed in Pomerania; a few other twin engine units may be sent in to help. The pivotal airfields for the entire Eastern Front are Kolobrzeg and Torn, for obvious reasons.

Particularly in the Baltic area, but on all fronts, the Germans must take care not to let the US slip through and reduce the Interior Front. Tempelhof especially, must be guarded; Anhalt and Bohemia are more forward and the Berlin-Sorau area is usually the final target area on which the whole game will turn, unless it is hit from behind.

The Fw190s, under this system, are the only units that can move from one front to another, it is somewhat wasteful to keep far-flung defenses but the German must prepare for all contingencies. If he clumped his forces in the center, he would give the US a free crack at Life outer-lying areas and hasten an awful reckoning. The only way the Germans can expect to utilize the principle of mass is locally.

This brings me to tactical doctrine. To make this defense work tile Germans must hit hard and often, in all areas. To stop the bombers, the best bet is to gather the entire front's forces together and jump on the enemy in on big smash, then give him in 'escort.' By the same token, the American's best means or blunting the Luftwaffe is to kill their fighters in the same manner, hit hard with everyone available.

Often, the American player will make the mistake of using his entire fighter force as an escort. True, the weaker fighters are good for nothing else. Also, it is somewhat true that a 14+ factor escort will slow the Germans down. But the latter case, with most or all US fighters chained to their "big friends" will allow the Germans to advance into bases in the Ruhr, refuel, and get at least one extra turn of the "big smash". Also, a big escort will discourage weak attacks but a determined German wilt gather his forces and hit so hard that he will break the escort's back (he must, for if he doesn't, retaliation will be swift and terrible).

US "heavy" fighters, P47s and P51s, are better used in "hunt" operations. Aggressive sweeps will intimidate or blow the German out of forward airfields and will bite big chunks out 0f anybody molesting the bombers.

In fact, attrition is a key factor. US fighters are expendable; the German, however, does not rise like the phoenix from his own ashes. Once, aircraft factories begin to go (about mid 1944) the German's accumulated replacements will start to decline. The German is over a barrel; he must stop the bombers, but with minimal losses.

And the bombers themselves are a weapon. Kept together as long is possible (especially if targets are all in one sector or on the way there), a formation will extract its own pound of flesh. Sector-strike planning will mean that the bombers will stay together to within one turn or less of the strikes, and thus gain the maximum defensive firepower from their massive umbrella formations.

The US should study the sectors to see how they are important to his own planning. This is easy in the southern, eastern, and Baltic regions, and is best left to the individual. Some suggestions in the Main Front are necessary, however.

Early attacks on the Rheinland may be more trouble than it's worth. There are 10 targets there, but most or all can easily be eliminated in 1945. Better to spend the effort neutralizing the Southern and Eastern Fronts before1945. Obviously, the Ruhr, the Netherlands, and Hansa will go before 1945 also. Any deeper Forays should be directed at Tempelhof

and Anhalt. Tempelhof is reachable from the Baltic and should be cleaned out as early as possible; Anhalt will be fiercely defended but its early loss will mean much in a battle of attrition. With Anhalt and Tempelhof partly or wholly eliminated, the final missions on Bohemia should be a mop-up. Theoretically....

In all the Victory levels a surviving Unit Attack factor ratio of 1:1 should be established. If more than a four Attack factor difference exists in the Axis favor, then it is considered an Axis Victory.

One special point: a badly underrated weapon is the German prop-driven, twin-engine fighter. E ratings aren't everything, as a quick look at the attrition table will show. Bombers don't have E ratings, as both sides should realize when considering the twin engine fighters, Especially in small engagements in the Southern and Eastern Fronts, a few Me4l0s or Owls will go a long way (in more than one sense).

In conclusion, it is my considered opinion that LUFFWAFFE is nearly even in balance; quite close. Certainly, the myriad of targets will keep the issue in doubt until the very end.

The US is disadvantaged as the attacker; He must reach out for his targets. But lie is more than compensated by his replacements is, by his options of attack all around the edge, by the fact that, once there, so little is needed to destroy a target. The German must defend the entire board with interior means (although letting him have Me262s in 1944 unbalances things; it's better to give him the grubby but cheap Komets and/or Salamanders); he is hampered by shrinking replacements in the face of mounting opposition; his enemy can appear almost anywhere. But all he has to do is save one city.

"Victory" is not necessarily winning a war, as the victory conditions quite rightly show.