

freier Streckenflug (von Herbert Pirker)

Teil 1

Dear friends,

HANS-WERNER GROSSE published in September 1998 an article in the German magazin "**aerokurier (9/98, page 56)**" with the title:

" Are the Rules of the German Decentralized Competition obstructing (restricting, limiting) performance?"

Although written mainly for German pilots, this article contains a lot of thoughts and ideas which are quite remarkable and worth while to be studied. It might revise our whole thinking about the predeclaring of way points.

For the German Decentralized Competition, pilots are allowed to fly Free FAI Triangles and Free Out and Returns, but get 15 % less points than for the corresponding goal flights.

One day, listening to the radio, HANS-WERNER GROSSE could hear somebody asking:

" I am now at the second turn point and I would be able to extend the leg of my predeclared task. How much do I have to fly more, if I don't want to get punished by a loss of points ? "

"To get **punished** for a longer and therefore more interesting flight ?" HANS-WERNER ponders.

" Unfortunately, the man is right." he continues, and in the following brings forward a lot of **arguments why we should abolish Goal Distance Flights or, in other words, abolish the predeclaration of distance tasks:**

The art and skill of navigating, because of GPS, has lost its importance.

We deceive ourself by pretending to know exactly that at 16 o'clock, hundreds of kilometers away, the turn point is under the blue sky, under a fresh white cumulus or in rain.

We often realize, after having experienced the first updrafts, that one hour ago we had predeclared too much or too little.

Because we don't want to sacrifice the predeclaration bonus, we predeclare distances which are more on the conservative and safe side. How many fascinating longer flights, which still might have moved our grandchildren, did we not fly because of that.

Predeclaring way points is merely a lottery or game of luck.

Pilots would not be tempted to cheat (see Steiner) by predeclaring two different tasks with the aid of two cameras or flight recorders.

Therefore, HANS-WERNER GROSSE would prefer only **3 categories of distance tasks** for the German Decentralized Competition, **which pilots would not have to predeclare, but claim after flight:**

FAI-Triangles

Out & Returns

Multi Turn Point tasks with restrictions to avoid simple Yo-Yo

By that HANS-WERNER GROSSE hopes that the stressful running to and fro between the glider and the satellite photos, the repeated modifying and predeclaring of tasks when thermals start later than expected, well, that all this would end and that we would be able to concentrate more on that what we really like to do by heart: the joyful and enchanting flying of great and even greater distances.

So far HANS-WERNER.

Teil 2

Von: Herbert Pirker [SMTP:bugwiper@ping.at]

Gesendet am: Mittwoch, 30. Dezember 1998 08:18

An: 'IGC Info'

Betreff: Austrian proposals for the IGC- meeting in march 1999 in Seattle

Dear friends,

HANS-WERNER GROSSE found out that due to GPS and other reasons the predeclaring of way points for distance tasks is a nonsense.

Therefore, we propose to amend the Sporting Code Rules by deleting the requirement to predeclare way points for all distance world records and for all badge flights, except for the diamond goal flight.

Best regards
Herbert Pirker

For more detail see the following letter:

Dear Mr. President, dear Vice-Presidents, dear Delegates, dear friends, I would like to draw your attention to the following problem:

HANS-WERNER GROSSE published a remarkable article in the German magazin "aerokurier (9/98page56)" (for more information see the enclosed annex to this letter).

With regard to this article the predeclaring of way points seems to obstruct (limit, restrict) the achievable distance performance. Accordingly, the requirement to predeclare the way points of distance tasks should be deleted.

HANS-WERNER GROSSE is the most successful world record flying pilot ever. He has collected extraordinary flying experiences over many decades and is still highly active: last year he flew for instance more than 17.000 km !!

Therefore, we believe that HANS-WERNER GROSSE knows what he is talking about and that we should take note of what he says.

In this sense it might be the right thing to apply his ideas to the

SPORTING CODE.

In WORLD RECORD FLYING we have got 6 DISTANCE TASKS, where we have to predeclare all way points except for some minor exceptions:

- 1) straight distance to a goal
- 2) out & return
- 3) FAI-triangle
- 4) straight distance (landing point free)
- 5) free out & return (turning point free)
- 6) up to 3 Turn Points (landing point and sequence of turning points free)

All these tasks contain way points which have to be predeclared.

Therefore, in accordance with the foregoing, they obstruct the achievable performance.

To avoid the obstruction they should be replaced by a set of 4 DISTANCE TASKS which don't have to be predeclared, but claimed after flight:

- 1) straight
- 2) out & return
- 3) FAI-triangle
- 4) up to 3 TPs distance

The way points of these distance world records may be chosen during flight, for instance by taking a photo of a significant ground feature or by setting a mark by the used GNSS-flight recorder.

In detail, we would like to propose the following:

PROPOSAL 1:

For all distance world records: Delete the requirement to predeclare way points (remote start and remote finish points included).

PROPOSAL 2:

For all badge flights, except for the diamond goal flight: Delete the requirement to predeclare way points (remote start and remote finish points included).

PROPOSAL 3:

If proposal 1 and proposal 2 should not find any support, then the requirement to predeclare way points should be deleted for the following three distance world records:

- 1) straight distance
- 2) free out & return
- 3) up to 3 TPs distance

This seems to be a good compromise to start with:

- a) HW's ideas would be applied only to these three distance world records,
- b) the amount of distance world record types would remain unchanged (six)

and

- c) the goal flights: straight distance to a goal, out & return, FAI-triangle, for which you have to predeclare all way points, would also remain unchanged.

This gives a system of two different types of flights: 3 goal flights and 3 free flights.

PROPOSAL 4:

In case proposal 3 has found approval by the delegates:

it is proposed to add the FREE FAI-TRIANGLE to the types of world records.

PROPOSAL 5:

If all foregoing proposals do not find any support then a SUB-COMMITTEE shall be nominated to work out an EXPERTISE about HANS-WERNER GROSSE'S ideas and their applicability to the Sporting Code.

Another subject:

PROPOSAL 6:

6.1) With regard to MID-AIR COLLISIONS we propose to study the effect of LUMINESCENT PAINT (on the nose, wing tips and fin) and the use of FLASH LIGHTS, specially adapted for gliders.

6.2) FLASH LIGHTS and/or other means to be mandatory for competitions.

ANNEX: [Teil 1](#)

I think he is right.

If we would transfer HANS-WERNER GROSSE'S ideas to the SPORTING CODE we would get only 4 TYPES of DISTANCE TASKS which we would not have to predeclare, but claim after flight:
1) straight distance 2) out & return 3) FAI-triangle 4) 3 Turn Point distance.

Well, what do you think about it ?

With best regards
Herbert Pirker "

Teil 3

Dear friends,

It is no secret any more that the predeclaring of way points obstruct the distance performance. Therefore, we propose to delete the requirement to predeclare the way points for all distance world records and for all badge flights, except for the diamond goal flight which we might keep unchanged for traditional reasons.

HANS-WERNER GROSSE gave a lot of convincing arguments why we should abolish the predeclaring of way points, but it is no problem to add even more to his arguments:

Additional arguments against the predeclaring of way points:

The performance in distance flying is measured by the flown distance. Therefore, the goal in distance flying is to achieve the highest possible distance. As the time is limited in which updrafts prevail the pilot has to fly as fast as possible and also as long as possible to accomplish this goal.

Flying performance = flown distance = (cross country speed) x (flying time)

In this manner every distance task is a special form of a speed task !

1) Measuring the flying performance:

By predeclaring the way points of the distance task you automatically prefix the performance you actually want to measure. Now, prefixing that what you want to measure is not really very clever. Or have you ever measured, for example, the voltage of your battery by the following method ? You have got only one trial for this measurement. You have got to use a voltage meter of a special kind, where you have to pre-set by a knob the value of the voltage which you expect the battery to have. You connect the cables to the poles of the battery. If the voltage is higher than the pre-set voltage a green lamp, if the voltage is less than expected, a red lamp and if it is equal to the pre-set value a flash light lits up. That's the only information you get about the voltage. You get the exact value of the voltage only if you would be able to guess it in advance (the flash light would lit up). Do you really think this to be a good and satisfying method to determine the voltage of a battery? In distance flying we use exactly the same method: Trying to measure the performance by predeclaring and prefixing the distance and then to see whether we are able to fly the prefixed performance or not. Of course, we would be able to measure the voltage of the battery exactly by repeating the procedure and by using the so called "successive approximation method". But in soaring this method cannot be performed, because the weather conditions are changing too much from flight to flight. Therefore - as we have got only one trial - the predeclaring method gives us the correct value of our flying performance only if we are able to know it completely in advance !! A wonderful measuring method, don't you think so ?

Are you still convinced that we should stick to the predeclaring of way points for distance tasks ?

Let's consider another example: high jumping. A soaring pilot, watching a high jumper at his trials to find his jumping performance by the normal "successive approximation method", would smile at the high jumper and would tell him proudly: We soaring pilots would proceed in a much better way: We would measure the jumping performance by setting the bar at the best possible position and by jumping only once. Of course, you score only, if you are able to surpass the height of the bar. This makes the thing far more exiting. You measure by that not only your jumping skill, but also your "bar setting", "predeclaring", "guessing", "forecasting" or "clear seeing" skill as you have got to set

the bar to the right height straight away. Well, furthermore, we would not favour your method of repeated jumping at all (in the same manner as we keep down the free distance flying) - or, if allowed in rare cases (for instance at decentralised competitions), we would score it far less by giving far less points as it is much easier to achieve a higher performance by it than by our "predeclaring" jumping method. As it is more difficult to achieve a higher performance by the "predeclaring method" it is clearly of a much higher value !!

Let's compare the examples with distance flying:

We are not able to use the "successive approximation method" by predeclaring, flying and repeating the predeclaring procedure, because the weather conditions change too much from flight to flight. Therefore: it is NOT possible to measure the flying performance of the pilot by the predeclaring of way points (unless the pilot is a clairvoyant, who would always know the proper way points in advance) !!

In spite of the foregoing, predeclared tasks are seen to be the best method to measure the distance performance. In decentralised competitions, like the Barron Hilton Cup, predeclared tasks are considered to be much more difficult to "fly" (to guess and fly) than free distance tasks and therefore get 15% more points for the same flown distance.

If we take a look at the distance tasks of the Sporting Code (world records, badge flights etc) we notice that there are no distance tasks without predeclared way points. The only exception might be the "free straight distance" flight. But even for this flight you would have to predeclare the remote start and remote finish points. The free out and return is not regarded to be worthy for badge flying, the Free FAI-triangle flights are excluded from world record and badge flying, etc. So, the measuring of the flying performance by using free way points is only possible in a very limited manner.

Well, are you still convinced that the predeclaring of way points is a clever thing?

2) Measuring the predeclaring performance:

You say that the predeclaring of way points challenges and tests your "predeclaring, task setting, weather forecasting skill" and that we are able to measure it by flying predeclared distance tasks ?

Let's start with an example. You fly for instance a predeclared 1000 km FAI-triangle. Does this really display your task setting, weather forecasting, predeclaring skill? This performance might have been the maximum for the given weather. But, who knows, the weather might have been much better than you had expected and you would have been able to fly perhaps a 1500 km FAI -triangle instead. So you see, the flying of the predeclared 1000 km FAI-triangle alone does not really show you your predeclaring performance. To get the proper feedback you would have to predeclare the way points and then to fly the corresponding free distance flight. Only the comparison of both would give you the predeclaring performance. If you were able to fly for instance a 1500km FAI-triangle instead of the predeclared 1000 km FAI-triangle then you would really know that your preflight declaration was rather poor and that the predeclaring performance (1000 km) would be only 66% of the highest possible one (1500km).

In other words: it is not possible to measure the "predeclaring skill" of the pilot by just flying the predeclared distance.

So again, the method of predeclaring way points not only fails to measure the flying skill of the pilot, but also fails to measure the predeclaring skill. So, what's the use of predeclaring way points ?

Are you still convinced that the predeclaring of way points are a good thing ?

Or do you think that predeclared way points are necessary to test your navigating skill?

In this case, GPS has made the predeclaring of way points obsolete.

Summary:

The predeclaring of way points do not, as supposed, enable us to measure the flying, predeclaring (task setting, weather forecasting) and navigating skill (performance) of the pilot in distance flying.

Therefore, the requirement to predeclare the way points of distance tasks seems to be the greatest nonsense soaring has ever invented. Don't you think so, too ?

Best regards
Herbert Pirker