

Sailplane & Gliding

2600

The arrival of the French Open Class at the World Championships in Bayreuth last year: an impressive example of team flying

Team flying techniques

Jean Molveau/Vol a Volle

In the third and final article of his series about competition flying, double World Champion and US Team Coach George Moffat explains why phoning a friend (or two) could help you win the big prize

TEAM FLYING has been around for 30 years and more, first practised systematically by the Poles in the Sixties. It was used rather spasmodically by leading soaring countries until the late Eighties when the French embraced it and took it to levels of almost mythic proportions. Nowadays almost no serious contenders for World Championships feel it can be ignored. While purists like my old friend Justin Wills and most American pilots (team flying is forbidden in US contest flying) might wish it would go away, the successes in the Nineties of the French, the Germans and the Italians are hard to ignore.

In fast-moving fields such as flying neither successful technologies nor techniques are likely to vanish. This article will cover contemporary methods and the problems which can arise. One word: if you are dubious, give it a try. Done correctly, it is a very enjoyable form of soaring.

Team flying must be based on trust if it's to work at all. Each pilot must be convinced that by sharing information to the utmost extent he or she will benefit in points by the end of the contest. Initially, this is difficult, since all our most primal instincts tell us to

MY BACKGROUND in team flying goes back to the Seventies, and includes two World Championships where it worked, one superbly, one pretty well; two Worlds with team-mates who flatly refused to try (both fairly paranoid types); and one where it just didn't seem to click. I have also been the US Team Coach for the last two Worlds with special emphasis on organising team flying.

I have absolutely no doubt that team flying is mutually beneficial, with a point advantage over a contest in the 300-500 point range. For example, Ben Greene radioed me information about a thermal up ahead which gained me 20 mins over Klaus Holighaus who was wingtip-to-wingtip with me 30 miles from the finish. Four Nationals' worth of two-place flying, two as pilot, two as tactician – a different kind of team flying – has proved interesting and valuable, especially in communication modes



Adrian Hobbs

hoard, not share, valuable information. Team flying will soon break down if one pilot starts thinking: "Well, I gave the last bit; now it's his turn". Give as ye have to give and trust that ye shall receive in kind. Sounds downright Christian, doesn't it? Works rather well in marriages, too ...

Problems, and there certainly will be some, need to be aired before they become major. Ideally these should be taken care of during the practice period. If major, there may be need of a moderator, a respected

pilot friend or the Team Coach on international teams. What sort of problems? My years of World Championships flying and coaching result in quite a list:

- the chap who always finds some pretext to go back for an unannounced re-start, using his mate as a forerunner;
- the team-mate who always parks himself in the five or seven o'clock position between thermals where he is difficult or impossible to see – and keeps useful information to himself; ...

- the one who seems to give ever so much information that turns out to be useless to his team-mate.

There's lots more I could add, but it's easy to see the picture. Trust, once lost or even grown shaky, is rarely recoverable. For team flying to work there has to be a sense of pride in team work, a sense of mutual achievement.

Codes

Pilots must work out codes for position, altitude and climb rates. Since in the United Kingdom there are only four legal channels, communications need to be simple and quick. Even in the Worlds, where each team has its own channel, brevity remains the soul of effective communication. An example might be: *353, 5 right, blue 37, red 3*. Translation: 53km from the turning point, 5km right of track, at 3,700ft, climbing at 3kt. (The initial number in the distance is arbitrary and meaningless to confuse the enemy.) Obviously, colours can be changed from day to day in the interests of secrecy. Note the absence of call signs. Team-mates should be familiar with each other's voices. Colour codes for important items such as start times need to be arranged, but keep the whole thing as simple as possible. In international flying the use of lots of slang confuses those listening in on scanners. In France in 1997 the French slang for an extra-good thermal was: "a big fart".

Leadership

Ideally, perhaps, each team should have a leader, chosen for amount of competition experience, familiarity with the contest site, etc. This is the leader-wingman format familiar from the military. If this format is used, the leader must lean over backwards to help and share information with his wingman, or confidence will very soon break down. Conversely, the wingman must make it known – and right away – if (s)he feels short-changed. The leader will be quite busy enough without having to be a mind-reader.

In point of fact, most pilots – being the independent-minded souls they are – seem to find this set-up too threatening. The widely-used alternative is the equal partner approach. In this case the partners need to come to some agreement – before the

contest starts – concerning such sticky problem areas as:

- start times
- different ideas on proper inter-thermal courses and/or ridge use
- altitude bands
- departure heights in wave flying (the French, at least at St Auban, seem to have fixed heights for departure)
- and there are quite a few etc...

The more problem areas that can be worked out in advance the smoother things will go in the heat of battle.

Types of team flying

The famous French method is **wingtip-to-wingtip**, flying usually but by no means always in close proximity. In actuality, the lockstep aspect of this technique has been exaggerated by the myth that has grown up around French success over the last ten years. Those familiar with Gallic individuality will hardly be surprised that all in-the-air decisions are highly democratic, often arrived at after impassioned discussion. The fundamental rules are: always team fly; help the low man recover; discuss all major decisions; and never wait. Each pilot must always be absolutely convinced that he personally will gain from team solidarity.

Traded information is the method most often used by the US Team, hampered as we are by our very far-flung geographical locations and the concomitant lack of opportunity to practise. It has the following advantages:

- far less practice-intensive;
- allows a greater degree of individual freedom;
- allow each pilot to have access to two – or more – sets of eyes, instruments and judgements;
- provides a strong sense of mutual support and is especially valuable on blue days and in wave flying.

Techniques

Starts should generally be within a minute or two of each other. The maximum should be five minutes. At normal speeds, a minute equals one and a half miles.

a) It is very important that one pilot does not always start second or circle back for an unannounced restart. Such practice soon erodes confidence, which in turn dries up

the information. This happened repeatedly on one major team in Bayreuth last summer, effectively ending team flying by mid-contest, causing a precipitous drop in the pilot's final score.

b) The pilot locating the first thermal gives the strength and GPS position in team code.

While **thermallings** discuss course options such as: "Black ten right?" (which would refer to a cloud 10° right of course). The top ship in a thermal normally makes the decision to leave and choice of course. Ships usually leave together, fanning out laterally, more so in blue conditions.

If flying in close proximity always turn in opposite directions on entry, unless the position of the core is clear from other gliders. First one in calls vario readings, second ship calls his/hers if better. Each ship keeps the other informed during the climb, for example: "better core 100 (yards) north". If in your partner's blind spot, always report your position. It's unnerving and causes a lot of inefficient head turning if the lead pilot has no idea whether his partner is still there. Each pilot should report leaving the thermal, with the second saying: "On your left" or whatever the case may be.

In **inter-thermal flying**, the leader should call out his vario readings several times a minute. The object is to allow the trailing pilot to catch up by avoiding sink areas. This is the French method but most find it too talky. All major decisions should be discussed between the pilots. This sounds chaotic but in practice there turn out to be few problems. In the initial stages of team flying with a new partner, too much information is better than too little. Hold post-flight discussions to evaluate progress. Have patience. Don't expect perfection immediately.

Team flying is most helpful in **blue thermal conditions**. Use a line-abreast formation 150-200 yards apart (more makes it too costly to join up in new-found thermals). A major advantage is the ability to spot minor lift or subsidence. If possible, maintain visual contact; if not possible the trailing glider must report conditions and position frequently. Failure to do so is extremely destructive of confidence. Both ships should fly ten to 15 per cent slower ➤

The T-factor – don't let hormones shoot you down

HALF the world, give or take a bit, seems to be afflicted with a condition which has, historically speaking, caused most of the murder, rape, plunder and genocide which mankind seems heir to. Looking at the whole thing in a more positive light, it has had a large part in the creation of every human, not to mention spurring on most of the major art, architecture, technology, discovery and world-champion-level soaring pilots. Testosterone, that's the culprit/benefactor. And what's all this got to do with team flying? Just this. Men are well known, to their non-T plagued consorts, to drive around in circles for hours rather than stop and ask for help. This is merely exasperating on the ground. In team flying, this apparently genetic inability to

seek aid leaves team mates in the dark and coaches pulling their hair out. In the last two World Championships, top-placed American pilots, team flying effectively up to that point, have gotten in trouble on the last day, turned off their radios and failed to complete the tasks despite the ready availability of aid from both team mates and the team coach and local knowledge advisor. One dropped to the 20s, the other to the teens in standing. It does happen to the best: maybe especially to the best, with their well-developed egos. When everything goes to hell – and it does occasionally, even for the best – forget the T-word and ask for help. A code word will do, something like: "Daisies", maybe. Use whatever form suits: communicate!