

DATE	SERIAL	GROUP	LOCATION
25 August	43-37596	92nd	Sovde
25 August	42-97121	92nd	Sovde
25 August	42-31992	95th	Sovde
25 August	42-98018	457th	Oved
12 Dec.	Unk.	Unk.	Trelleborg
7 Oct.	42-97196	351st	Nykoping
7 Oct.	42-31087	401st	Bredakra
7 Oct.	43-37674	351st	Bredakra
7 Oct.	44-8222	Unk.	Sovde
7 Oct.	42-31192	351st	Farabol
7 Oct.	42-38452	401st	Ljungby
7 Oct.	42-102905	457th	Jonkoping
7 Oct.	43-38426	351st	Jonkoping
12 Oct.	Unk.	Unk.	Bulltofta
30 Oct.	Unk.	Unk.	Trollhattan

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14 Jan.	44-8314	493rd	Bulltofta
17 Jan.	44-8602	452nd	Bulltofta
17 Jan.	43-37745	452nd	Kalmar
3 Feb.	42-97658	306th	Bulltofta
12 March	43-38358	452nd	Rinkaby
12 March	44-8577	92nd	Bulltofta
18 March	42-97288	92nd	Bulltofta
3 April	43-38871	96th	Bulltofta
4 April	43-38814	95th	Bulltofta



ABOUT THE AUTHOR

Steve Birdsall is Australian, married, a free-lance writer, lives in Sydney, joined A.A.H.S. in 1963 and became the B-17 Aircraft Specialist in 1966. The photo was taken during his service in Vietnam in 1967, mostly in A-1 Skyraiders. The latter is the subject of a forthcoming book based on his experiences, to be published by Arco Publishing Co. His previous books, also by Arco, were *The B-17 Flying Fortress* and *The B-24 Liberator*.

AEROVIGNETTES

By D.D. HATFIELD

IS YOUR JENNIE NOSE HEAVY?

Many early pilots will recall the frustrating experience of rerigging a nose-heavy or tail-heavy airplane. Curing tail heaviness was usually accomplished with a pocket full of washers placed under the forward stabilizer support until the incidence was sufficient, this being before the advent of the adjustable stabilizer.

The following adjustment for nose-heaviness, unique in its simplicity, was reported by the Chief of the Engineering Division, McCook Field, Dayton, Ohio.

"Reports, various and numerous, have come into the Engineering Division at McCook Field from Air Service stations. All agree on one point — that the JN-6HG airplane is extremely nose heavy and logy, making flying manual labor. As a result many of the 496 airplanes of this type at various stations are not being flown.¹ The problem of elimination of the defect has heretofore withstood all attempts at solution. It has been the veritable nemesis of engineering officers, the awe inspiring demon of perversity of riggers, persistently and incessantly thwarting the best of their knowledge and experience, and, finally, the invisible gladiator with which the pilots who are forced to fly these derelicts match themselves in feats of physical prowess, a constant and ever-increasing drain on their strength.

Hopeless, dejected, steeped in the depths of the slough of despair, the oppressed, with a titanic effort, compiled, co-ordinated and crystallized the evidence of the momentous problem, and presented it to the Engineering Division.

A conference was called of the heaviest and most powerful aerodynamic experts extant, two privates, first class, and a second lieutenant, and the problem placed before this august body. After the subject matter of this report had been read in detail, a singular and significant phenomenon occurred — discussion was conspicuous by its absence. Silently, effectually, but thoroughly was the conference dissolved, and each participant, wearing a profound look

of concentration, and cloaked in the enveloping mantle of dignity and authority which is peculiar to the expert worthy of being called a savant, retired to his sanctum sanctorum, where in repose he could wrest the solution from his volume of abstract science with the aid of his tools, the water-cooled slide rule, integral tables and an integrator. The problem baffled the experts for a time, but persistency is the corner-stone of accomplishment, and their efforts were gloriously rewarded when an article was discovered in the secret archives by an eminent authority on stability. Briefly stated, the essence of the report was to the effect that the tail plane section was the crux of the stability problem; that in no case was the lower surface to be entirely devoid of camber, if the flying qualities — more particularly those relative to longitudinal stability — were to be unimpaired.

A detailed inspection of this JN-6HG tailplane disclosed the fact that their suspicions were well founded. This element being detached, its section was subjected to microscopic examination — instruments calibrated with the Johanssen blocks being used; computations and calculations checked and rechecked by the theory of probability and least squares, and, allowing for mean deviation, it was found that the lower section was as flat as a pancake.

Further consultation resulted in the unorthodox and radical procedure of turning over or inverting this member, thus placing the cambered upper section nearer the point of attachment and the flat surface uppermost. A flight test of the newly modified plane was the next step in the procedure, and was observed with interest, the report of the pilot being anxiously awaited.

No sooner had this prodigy landed than the pilot was interrogated and cross examined as to the balance and general behaviour of the rehabilitated "crate." His report substantiated and gratified the fondest expectations of the dabblers in experimental research — the balance was improved to the decimal point of their calculations. To summarize the report: "She ain't quite so nose heavy."

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