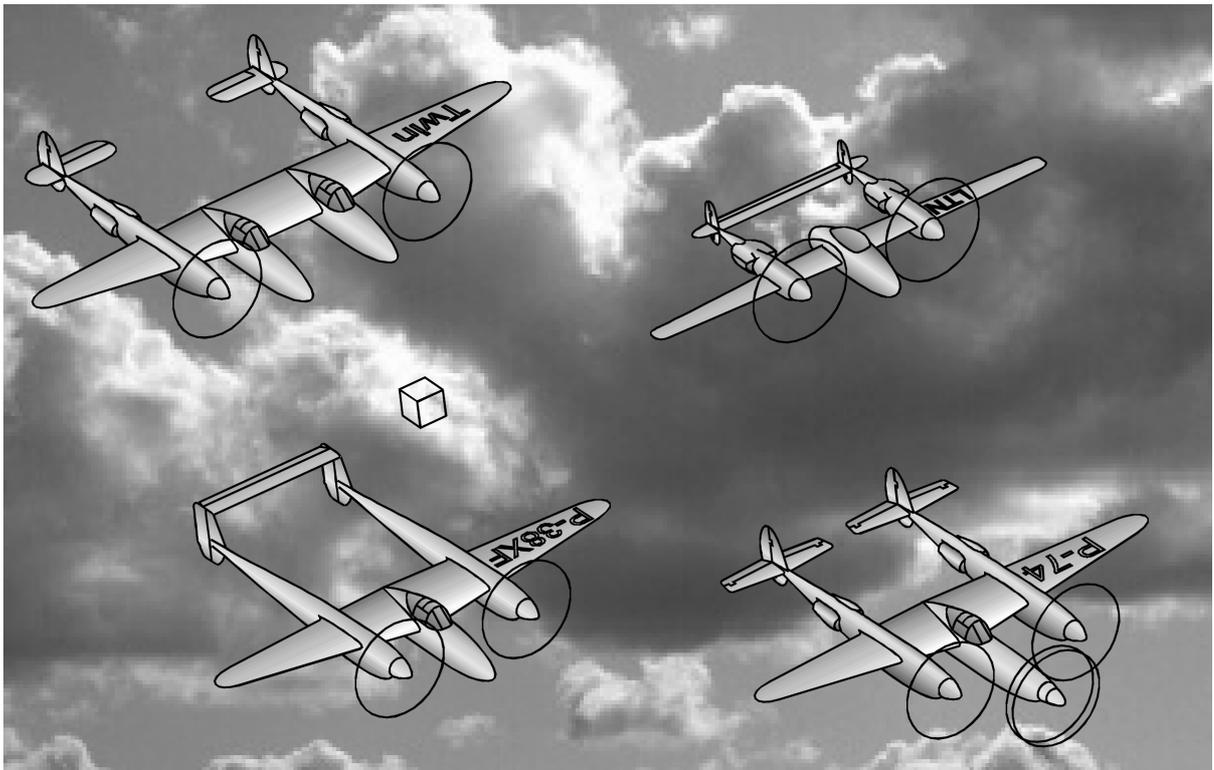


## Exotic Lightning

In the first edition of "Fantômes fourchus", we decided not to include the P-38 Lightning, which is the most famous of all twin-boomers of all times, and was the most mass-produced, with more than ten thousands being produced. We mentioned in passing by-product projects (asymmetric RP-38, Float Sea-38, L-106 with air-cooling engines, canard P-38). But there are some other ways to include the Lightning into projects of this era. At first, a humorous fictitious double-Lightning that we drew, with initial corrections (Lockheed/Meunier Twin-Lightning).

Then we mentioned a very poor 3-dimensional computer model, on a disk with the Corel Draw 6 software; this file, from Lockheed/Corel, is named "P\_38LTN.d3d" (LTN for LighTning?). It does not refer to the XP-38 project (before 1939), but to the famous mass-produced Lightning (1939-1945), the recent change in shape making it an unrealistic P-38. We introduce it here following our usual angle.

Then, there are some unconventional models, as the Lockheed/Fordham P-38 XF, with a quite modern looking tail. And the Lockheed/Halsted P-74 Forked Lightning, made by mixing one P-38 with several P-51 Mustang... This P-74 code was a famous mystery, between the Hughes XP-73 and the Fisher P-75. But if a 3-engined P-38 had been designed, we would have preferred a push-pull one, with all the advantages of a twin boom shape, like the Savoia-Marchetti trimotore and Combattimento Santangelo.



Twin-Lightning, P\_38 LTN, P-38 XF, P-74 Forked Lightning

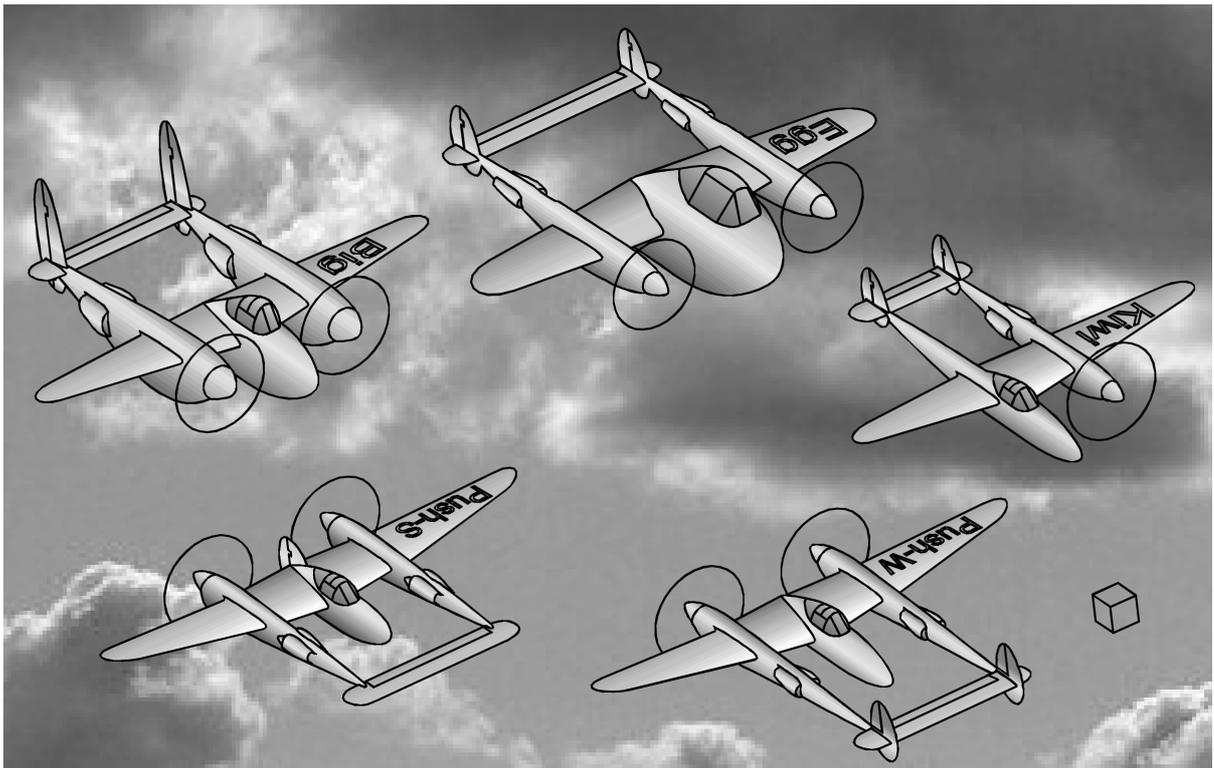
## Still worse...

Concerning the non-existent P-38, we can add an idiosyncratic caricature, in which all heights have been doubled: this results in the Lockheed/Meunier P-38 Big Lightning – rather "cute" isn't it?

Better still, in the same domain: a plastic model kit society produced a batch of "egg-planes", including a P-38. Of course, this Lockheed/Hasegawa Egg Lightning has been mass produced, and this is more than a design, but in all events this is the fantasy creation of a mad designer... This reference is included even if, strictly speaking, it is outside our scope.

Then comes another innovation in the P-38 family: canard models, with a reversed pod and pusher propellers. Military observers would probably fear that their nose guns would destroy the foreplanes... Well, this could have been a suicide aircraft... Two models have been created: a Lockheed/Steacy Pusher Lightning with a single aft fin and a Lockheed/Winthrop Pusher Lightning with two front fins, which was maybe more easy to build (from a standard P-38) but is less satisfactory for an aircraft.

Last anomaly: a single-engined asymmetric P-38, following the shape of the Bv 241, seen previously. This Lockheed/Winthrop P-38 "Kiwi" is amazing...



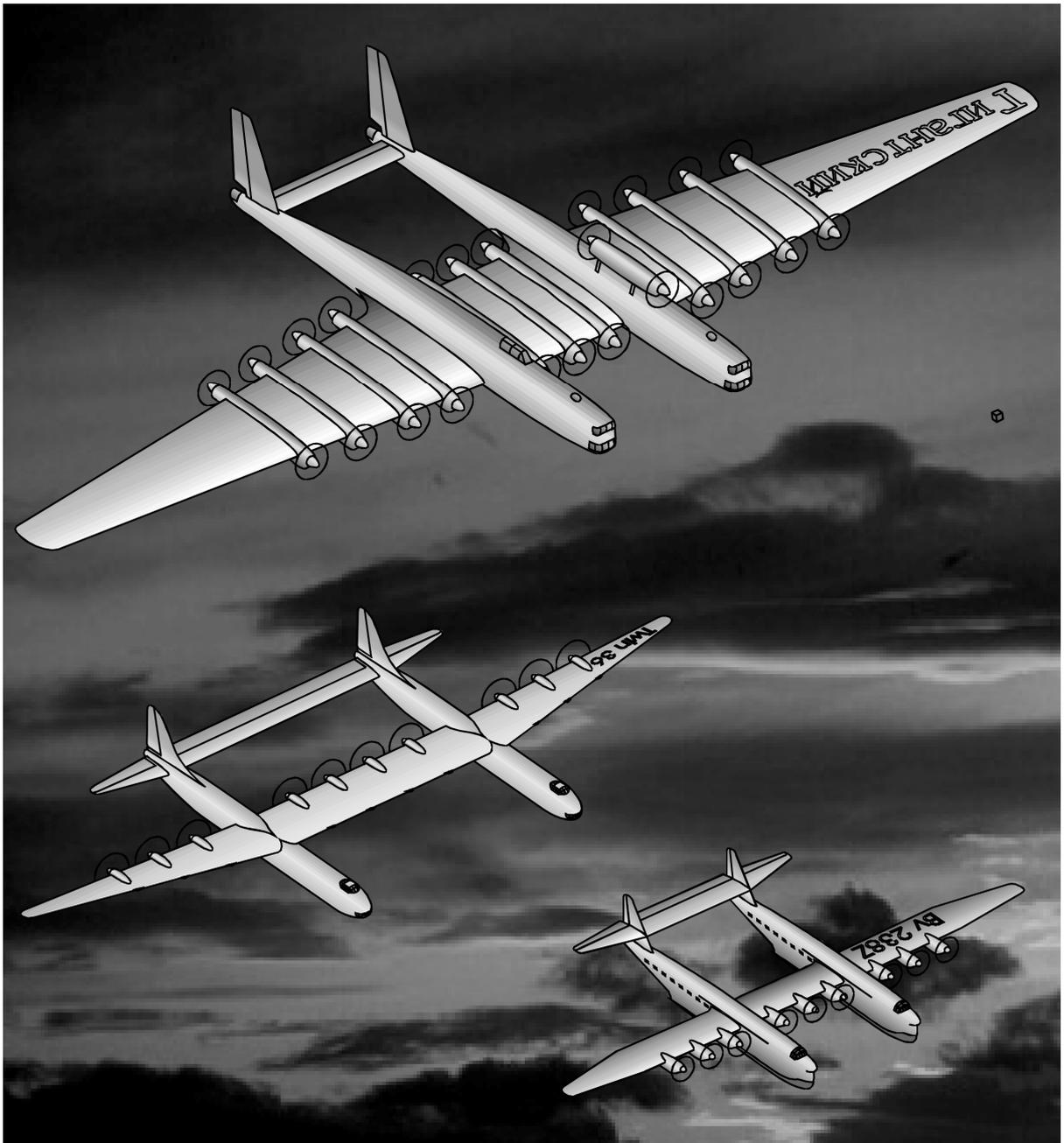
Big Lightning, Egg Lightning, P-38 Push-Steady, P-38 Push-Winthrop, P-38 Kiwi

## Big ones

In the World War Two 1946 cartoon book series, there is a huge twin-fuselage aircraft. Its name and size (giant according to a tiny fighter aboard) remain unknown. We called it Tupolev/Nomura Gigantskii.

In the related cartoon serial Luftwaffe 1946, there was something as a twinning of two Convair B-36 Peacemakers (planes of the 1950s, but initially designed in 1941): Consolidated/Nomura Twin Model 36.

The biggest *real aircraft* in 1945 was the Bv 238 V1 prototype. We heard that doubling this one was eventually imagined as the Blohm und Voss/Nomura Bv 238Z, in the cartoon books Luftwaffe 1946 – or Shonen Captain Comics.



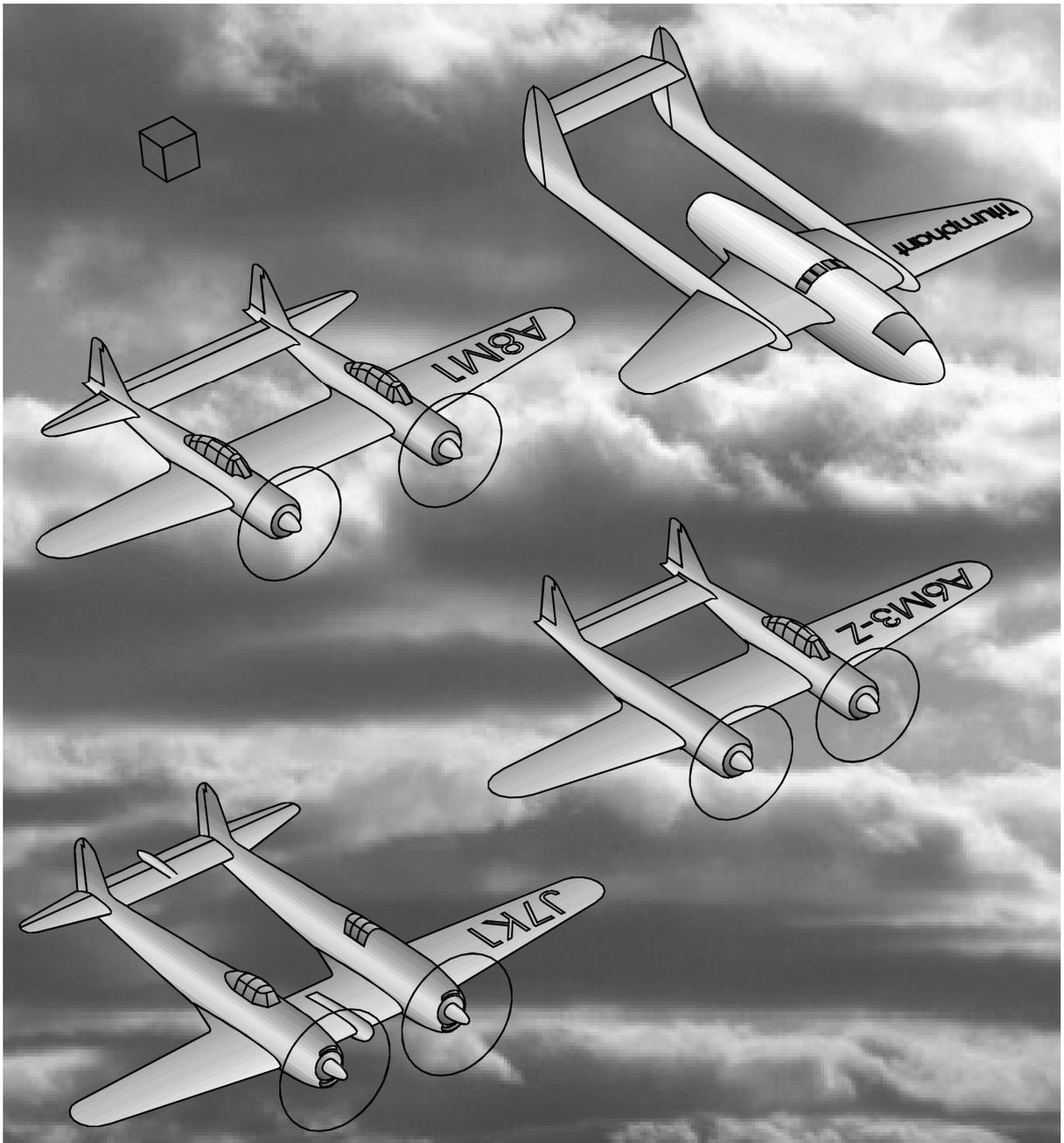
Gigantskii, Twin Model 36, Bv 238Z

## Rising sun

A kind of Vampire may have been designed in the Far East. Its name is Triumphant Wind in English.

Besides, a Mitsubishi 18 "Zero Zero Wind", code A8M1, is to be found on the Internet, with a (fake?) photograph and a design. This prototype, built from two A6M Zeros, would have been completed on April 1st, 1945, and this improves its credibility... A plastic model, rather different, have been built: the Mitsubishi/Miura A6M3-Z. The Internet file in which it may be seen is named *joke*...

Then, another modelist created a double lengthened N1K2-J Shiden (George), and we may call it Kawanishi/Ishiduka J7K1.

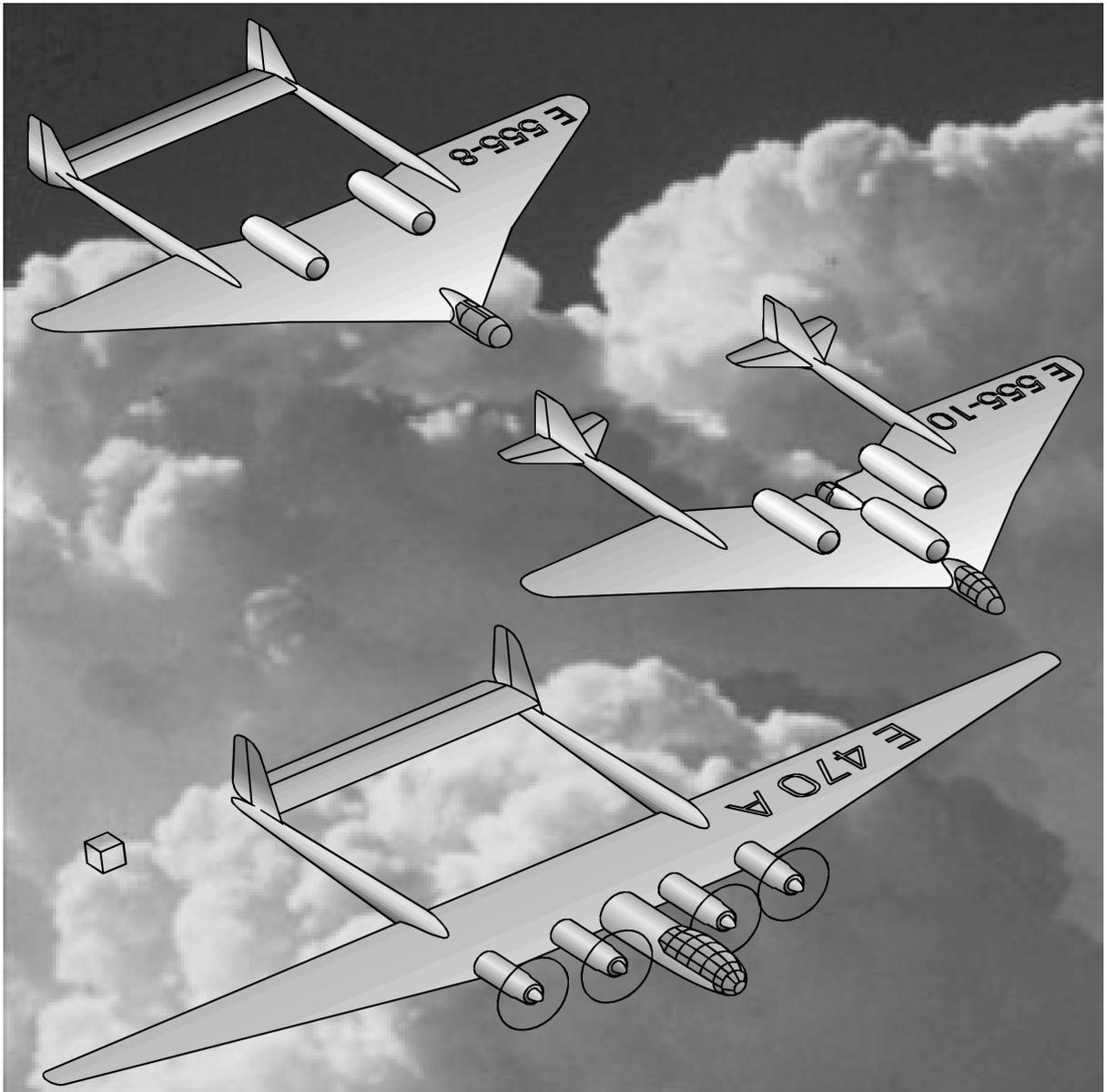


A8M1, A6M3-Z, J7K1, Triumphant Wind

## Addition concerning Arado projects

Concerning the E-555 model, we have presented the -9 variant with external stabilizers. Actually, the models -8 and -10 also had a twin-boom shape, differently.

The project E-470 has also been revealed recently. Giant aircraft with external booms like the Fw 261, this 130-tons model had a 9,000 miles range, it has been proposed in 1941. Versions A to E, with various sizes (155 to 225 feet span) would have been rather classical, but the Model F would have carried a disposable container. The E-470 would have used 4 or 6 engines, the Nr.5 and 6 being jets under the wing or propeller-engines on the wing as for the others.

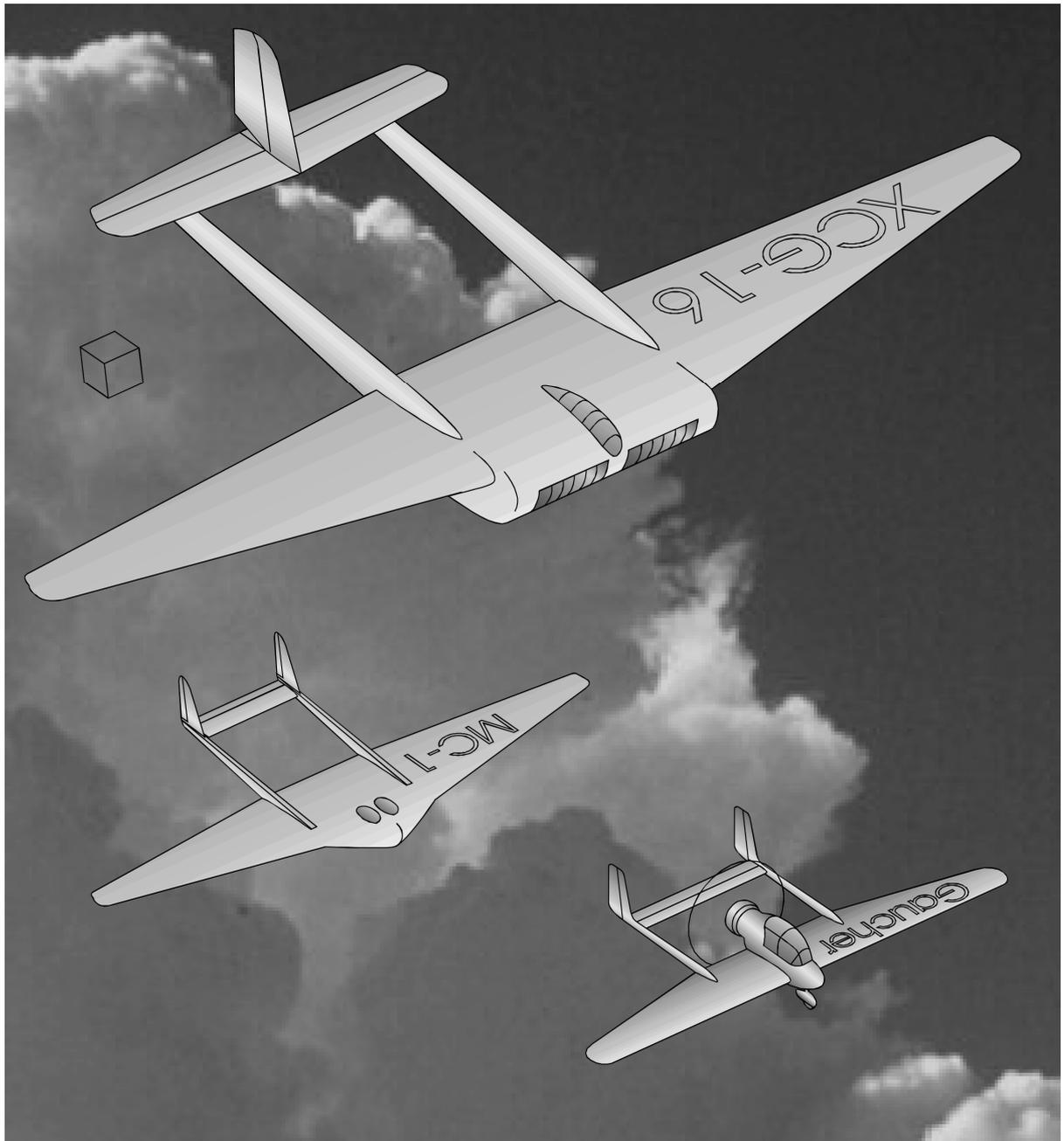


E 555-8, E 555-10, E 470A

## The end of the road

In the Forked Ghosts book, we made a mistake, drawing a half-scale CG-16 with the name *project MC-1*. The prototype glider General Airborne XCG-16A did not reach production, but it was not only a double MC-1: this *proof of principle* craft had two fins, a sharp nose, two cockpits and no portholes (without the bubbles that we design here to hide pilots...).

Very last minute addition: a side-by-side two-seater, wooden twin-boomer of unknown name, has been designed during the war by Rémy Gaucher, probably outside his 1938 Sud-Aviation society.



XCG-16A, MC-1, Gaucher twin-seater

## ADDITIONS WITHOUT PICTURE

Apart from visual information, we can provide some additions concerning the twin-boom projects of 1939-45:

- *True discoveries*: We have found on the Internet, for this period, mention of 5 twin-boom projects of unknown aspect that we did not know previously: Heinz monoplane (American flying boat), Lavochkin La-VRD (single-jet), Messerschmitt 1939 *single-jet twin-boom*, Rosatelli CR.50 (twin-engined twin-fuselage), Vakhmistrov 1944 *twin-boom glide-bomb*.

- *Complementary names*: The twin-fuselage project Macchi MC.300 has been mentioned, on the Internet – it is synonymous with the C.205 Bifusoliera. Also, the twin-boom projects Ta 184 and Fw 226 have been mentioned, in books – they refer to the Focke-Wulf Flitzer P.IV to P.VIII (officially, the RLM codes 184 and 226 were not allocated to Tank and Focke-Wulf, but to Flettner and Blohm und Voss, and not for any twin-boomer...).

- *Misidentification*: A British veteran wrote that he encountered, in the skies above the Mediterranean, a twin-boom *FW119 (the Zerstoror)*, of the Luftwaffe. After a long search, we cannot confirm its existence. It could be a misprint for the Fw 189 Uhu. But this one was a reconnaissance aircraft, the only variant that could be called *Zerstoror* (destroyer) being the Fw 189C, that remained only a prototype and stayed on its test base, far away from the Mediterranean sea. And the official code RLM 119 was allocated to Heinkel (He 119) and not Focke-Wulf (Fw 119). Then, no true-*Zerstoror* twin-boom plane went into service, the Me 609 being the only one and remaining on the drawing board. Speaking of a *twin-boom FW119 (the Zerstoror)* would be erroneous. The evidence must be accepted (an enemy twin-boom craft has been seen, on this very day), but we must assume it was incorrectly identified.

- *Variant*: The twin-boom project Matra R 110 must be included also. But its external shape is exactly the same as the R 100's. It simply featured a single big engine, replacing the twin coupled engines of the R 100.

- *Fake*: The twin-boom project Lockheed F1V C-Fork has been illustrated on the Internet, with a scale model wearing the US Navy markings (site: Aircraft Resource Center/ Gallery/ Miscellaneous/ Silly Weird Models). But it was just imaginary, answering the question *What if the float P-38 had been built and ordered?* We had illustrated this project, calling it *Sea P-38*.

- *Misunderstanding*: Exploring the Internet, to see if there had been a Ju 88Z in History (Z meaning often Zwilling, thus Twin, thus Twin-fuselage), we were surprised to get a positive answer. But reading the related page, we found that it was a Ju 88 Z-Zerstoror (destroyer) and not at all a Z-Zwilling. So, the Junkers/Meunier Ju 88 Zwilling owed its brief existence to a misunderstanding, and it was not enough to include it here. It is even worse than the poor subject that was the He 219Z. And here we don't try to illustrate *anything that can be imagined*, it would be endless. We must admit that 43 drawings among 72, in this complement leaflet, concerned present designs smilingly dated 1939-45 (in *Forked Ghosts* itself, only 2 among 175 were of this kind), but most of them were actual projects, from modeller enthusiasts and professional cartoonists - our apologies to those devoted exclusively to real designs, we hope that they will not take exception to our introduction of such ghosts. Sorry...

Now let us update the appendices.

### **List of projects just before 1939-45 (dated 1935-38 )**

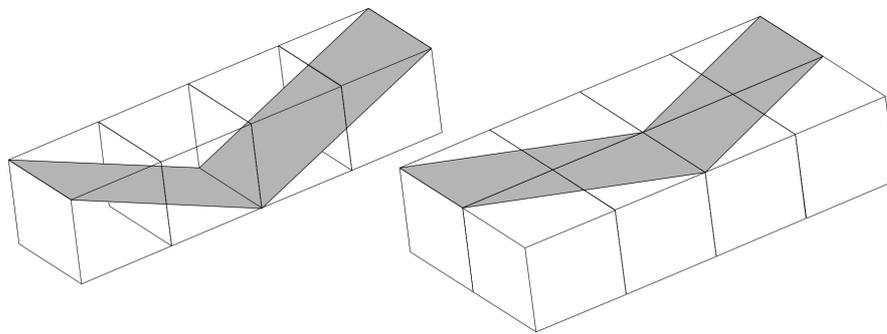
- Additions (recent discoveries of the author):
  - Twin-fuselage: Boeing 320, Saalfeld Möwe
  - Twin-boom with pod and rear airscrew: De Schelde S.22, Mantz Pusher, Gü 7 (of unknown designer), Martin 151K-1 Twin Bomber (push-pull), Caproni Ca.150 (push-pull)
  - Twin-boom with pod and lateral airscrews: Willoughby Delta 9G St George, Martin XB-16A, Junkers EF 50
  - Miscellaneous: McGaffey Aviate (with nose airscrew).
- Maybe we should have included some fictitious airplanes from the Microsoft game "Crimson Skies", because the date in this unreal world is 1937, and we can imagine that these aircraft would have been "brand new" ones, designed in 1935 or 1936. Among those aircraft, two twin-boomers: the McDonnell S2B Kestrel (twin-fuselage) and the William & Colt Peacemaker 370 (with a pusher propeller)...
- As well, speaking of fictitious projects, we should have included a 4-engined twin-boom flying-wing model used in Fighting Devil Dogs in 1938 ("The Lightning") and in Dick Tracy serials ("Spider's Wing").
- In the same way, we maybe should have included a twin-boom flying-wing seen in the film "Raiders of the lost ark", quite recent (1981) but whose action is set in 1936... It features 2 booms carrying fins aft of the wing, without an horizontal stabilizer there (a feature common on Rutan aircraft, but the Rutan 76 Voyager, Scaled 151 Ares or Scaled 281 Proteus have also a canard foreplane, which produce a "triplex-boom" shape). And this Hollywood aircraft is double: the model which exploded in the film had pusher propellers, aft of the booms, while a model shown in an amusement park (with actors playing the scene) has tractor engines ahead of the booms...
- Correction: the old project E500 was from Arado, and not Gotha.

### **List of projects just after 1939-45 (dated 1946? )**

- Additions (recent discoveries of the author):  
Lockheed L-153-11, Convair/Stinson 106 Skycoach, Skylark 246, Curtis Wright CW-21 (no relation at all with the Curtiss-Wright CW-21 of 1938, not a twin-boomer...).
- Corrections: the "LIT racer" should have been called "Lawrence Special"; the "Eldred Floatplane" should have been called "Eldred Flyer's Dream"; the "Kaiser-Hammond Aircar" could have been called "Kaiser-Hammond Y-2 Aircar" (this code designing a project coming from the Stearman-Hammond Y-1 of 1936).

## Miscellaneous corrections (in Forked Ghosts)

- The left propeller of the P.125 is too much forward (between fuselage and canopy...).
- The Fokker F25 Promotor should not have been rejected as too recent (it was actually a 1945 project) but as being far more than a project (21 copies have been built).
- Replace "Weeler" on the wing by "Wheeler".
- The LEM-2 canopy should have been a "bird-cage" and not a bubble.
- An explanation should have been given, about cases where the distant half-wing seems to be "larger" or "longer" than the nearest one, which seems illogical. In fact, this is a normal consequence in cases of sweep wings or dihedral wings:



## Index

- A user's guide is missing for the index: if you wonder whether an aircraft named X is included in the book, check the "liste principale" (main index); if you do not find it, check the "cas limites" list (rejected cases for date or definition reasons) then/or check the "renvois" part (linked names). If you know of any overlooked, 1939-45 designed, twin-boom project, and this one is still missing after those 3 searches, and also not included in this supplement leaflet (and further Forked Ghosts elements), then please inform the author (by E-mail at [cmeunier@infonie.fr](mailto:cmeunier@infonie.fr)). Thanks...
- The Combattimento Santangelo should have been classified with S and not C; at last, the Payen Pa.42/1 should have been called Pa.600.
- The names "C.S." and "Caccia Santangelo" should have been linked to Santangelo, "Combattimento" and "Caccia-Combattimento" to Santangelo and SIAI trimotore, "Fw 281" and "Ta 281" to Focke-Wulf PTL-7, "OKA-33" to Antonof LEM-2, "GAT" to Airborne Transport, "PA" and "PAL" to Portsmouth (Aviation Limited).
- "Beryef B-10 (2)" has been forgotten in the second list.
- The old Payen Pa.445, and maybe the Vought V-173 / XF5U should have been included in the index.

## LIST OF ITEMS THAT REMAIN UNKNOWN

### **Partly unknown projects, with provisional drawing**

Blohm und Voss P.61/123/124/125  
Brewster P 33 Rev.II  
DFS-Klemm 25 Z  
Dornier Do 435 Z  
Heinkel He 111 Z/3m and 4m  
Junkers EF-135  
Kaiser Flying Cargo Ship  
Messerschmitt Me 409/1m and Me 509 Z  
North American NA-116, RD-1120, Twin-51G, XP-82/1s  
Piper PA-7  
SAAB L.13, J.21B and RX-2 biréacteur  
SNCASO SO-1070

In this supplement are also provisional the drawings of:

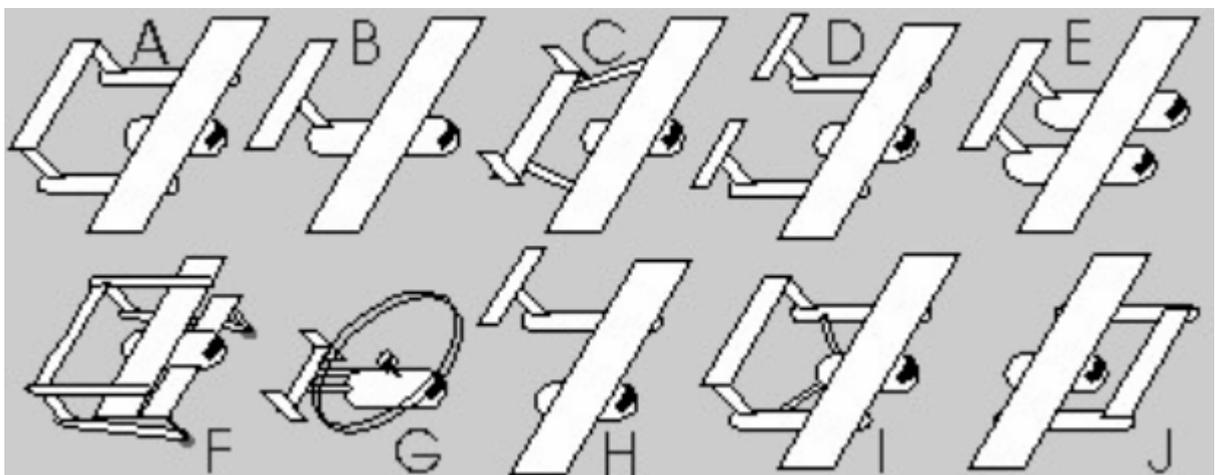
CAPRA R 90  
Dupuy  
Me 323Z  
He 219Z  
Bv 238Z

### **Inaccurate drawings, here corrected**

Payen Pa.150 Otarie, Pa. 42/1

On the Web site <http://cmeunier.chez-alice.fr/index.htm> is the final judgement about drawings in the whole collection: wrong, dubious, provisional, fiction, wrong date, limit.

## VARIOUS DEFINITIONS FOR THE "TWIN-BOOM" WORD



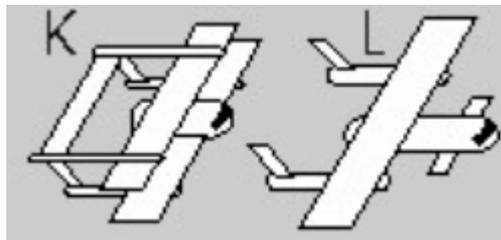
(Source) Twin-boom definition =	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)
(French magazine <i>Le Fana de l'Aviation</i> ) Kind of double-fuselage (e.g. Caudron G.III)	YES	no	YES							
(English Aviation Glossary on the Web) A type of aeroplane whose tail surfaces were connected to its wings by two long fuselage-like structures	YES	no	YES	YES	YES	YES	no	no	YES	no
(French book <i>Fantômes fourchus</i> ) Aircraft with 2 booms carrying the stabiliser(s) or fin(s)	YES	no	YES	YES	YES	no	YES	no	no	YES
(French book <i>Fantômes fourchus</i> , English abstract) Aircraft whose tail is carried by 2 booms and only 2	YES	no	YES	no	YES	no	YES	no	no	no
(French book <i>ULM</i> ) Aircraft whose rear part of the fuselage is made of 2 main booms carrying the tailplane	YES	no	YES	no?	no	no	YES	no	YES	no
(French dictionary <i>Robert /Aviation</i> ) Airplane whose rear part is replaced by 2 streamlined booms	YES	no	YES	YES	no	no	no	no	no	no
(French book <i>Catamarans du ciel</i> ) Aircraft with 2 booms, making a closed frame for one piece of sky, seen from underneath	YES	no	YES	no	YES	no	YES	no	no	YES
(French dictionary <i>Hachette</i> ) Airplane whose rear part is made of 2 booms carrying the tailplane	YES	no	YES	no?	YES	no	no	no	YES	no
(French dictionary <i>Larousse</i> ) Airplane whose tailplane is connected to the rest of the structure by 2 booms	YES	no	YES	no?	YES	no	no	no	no	YES
(French dictionary <i>Robert /General</i> ) Including 2 parallel booms connected to the same structure (e.g. some factory lift devices)	YES	no	no	YES	YES	YES	YES	no?	YES	YES
(French dictionary <i>Maxi-Dico</i> ) Including 2 parallel booms	YES	no	no	YES	YES	no	YES	no?	YES	YES

One simple answer to solve the discrepancies is to say that each definition features optional properties (parallel booms, rear booms, etc.), but if nothing is clearly mandatory, the Airbus 320 and Boeing 747 (drawing B) can be absurdly classified as twin-boomers...

So the twin-boom criterion remains very difficult to precise, and this explains controversial judgements about the non-genuine twin-boom rejections in special books like our "Forked Ghosts" and "Catamarans in the sky".

Writing an encyclopaedia of twin-boom aircraft seems difficult in such circumstances. But for other subjects like airplane, helicopter, aircraft (or automobile, tree, etc.), limit cases bring also huge definitional problems, and this has not prevented publication of thematic encyclopaedia. Our main problem in eventually putting together this encyclopaedia, which is missing for sure, is the management of photograph copyrights, and this leads us back to drawings, then to projects (acceptable without photographs)...

The lack of any Twin-boom definition in English dictionaries is surprising, but the problem does not arise from French "logic": several English books show twin-boom uses that do not obey the English glossary sentence above, the main discrepant examples being types K and L.



This twin-boom definition issue was partly analysed in the book "Catamarans in the Sky" and is going on inside "The end of Forked Ghosts", but most of all is fully covered on the Web site:

<http://cmeunier.chez-alice.fr/bipoutre.htm>

There are counted a half million of discrepant definitions for "twin-boom", so this subject (as defined here) is subjective, personal. This would be a problem in a historical catalogue, but for an amateurish book, now completely free, and including fantasy, this seems acceptable: one subject among many possible ones, showing many gathered oddities, closed to one another visually. And remember that the choice of 1939-45 is just famous years, as there would be far too-much twin-boomers in the window 1896-2009.