CG = Transport Glider (1941-1955)

The G series was introduced on 11 June 1948 and continued the CG series.

Last update: 1 February 2015
The XCG-1 was an 8-seat glider ordered on 7 May 1941. Although a static test airframe was delivered on 27 December 1941 which failed tests on 7 January 1942. Consequently the construction of a single flying aircraft with serial 41-29615 was cancelled on 31 March 1942.

The association of three Fletcher XBG-2s serialled 42-46902/46904 with the XCG-1 designation, as suggested in older references, is probably incorrect.

Refer also to CG-2 and BG-2
The XCG-2 was a 15-seat glider of which one was ordered on 7 May 1941 with serial 41-29616. It was basically an enlarged XCG-1 and, following the failure of the XCG-1 static test airframe, the development of the XCG-2 was cancelled on 31 March 1942.

Refer also to CG-1
An eight seat glider of which one was ordered as XCG-3 on 6 June 1941 with serial 41-29617. A static test airframe was also ordered. The XCG-3 had a span of 80'6", 24.54 m and length of 46'4", 14.12 m. It flew for the first time on 3 February 1942. A static model was also ordered.

This was followed by the CG-3A production version with 9 seats and of which 200 were ordered from Waco on 20 March 1942 whereas another 100 were ordered from Rearwin (later Commonwealth) on 23 April 1942, increased to 200 on 19 June 1942. As the focus changed towards the larger CG-4 design, the Waco order was changed to CG-4s on 14 July 1942 whereas the Commonwealth order was reduced to 100 on 6 November 1942. The latter carried serials 42-43518/43617 and the aircraft were used for training only.

After 11 June 1948 the G-3 designation was used for the PG-3 design.

Refer also to CG-4
CG-4
Waco NZR Haig

Specifications:
span: 83'8", 25.50 m
length: 48'8", 14.83 m
max. speed: 120 mph, 193 km/h

The XCG-4 was a 15 seat glider of which one was ordered on 6 Jun 1941 with serial 41-29618 along with a static test airframe. The first flight was in May 1942. A second aircraft with serial 42-53534 was ordered at a later date and incorporated a modified hinged nose that allowed loading a jeep. It was designated as XCG-4A.

The production of 13916 CG-4As was undertaken by 16 different firms, some of which had no previous involvement in aircraft production. The break up of the production (and cancellations), along with the serials, is given in the following table.

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Serials built</th>
<th># built</th>
<th>Serials cancelled</th>
<th># can</th>
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<tbody>
<tr>
<td>Waco</td>
<td>42-78923/79422</td>
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<td>43-37009/37508</td>
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<td>45-5201/5275</td>
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<td>Babcock</td>
<td>42-47392/47441</td>
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(Source: USAF, via 10af.afrc.af.mil/photos)
The aircraft were delivered in five crates and many were stored on delivery and never flown. A batch with serials 43-19374/19673 may also refer to the CG-4A. On 11 June 1948 those remaining in service were redesignated as **G-4A**. Substantial numbers were supplied to the RAF as Hadrian. The **XCG-4B** was a single aircraft completed by Timm of wood only. The serial was 42-46394 and the aircraft was ordered on 13 May 1942. Delivery was in April 1943. The **G-4C** designation was assigned to 35 G-4As which had been converted with US Navy towbars. In November 1943 the designation **CG-4D** was used for a version with a large number of improvements that eventually led towards the CG-15 design.

*Refer also to CG-3, CG-15, PG-1, PG-2, LRW*
CG-5
St. Louis SL.5

Specifications:
span: 39'3", 11.96 m
length: 64'7", 19.69 m
max. speed: 120 mph, 193 km/h

A single example of the XCG-5 8-seat troop glider was ordered on 28 June 1941 with serial 41-29619 as well as a static airframe. The latter was delivered on 22 February 1942 and was found deficient due to poor workmanship, due to insufficient experience of the staff as well as insufficient staff at St Louis. The XCG-5 flew for the first time on 3 October 1942. The aircraft was found to be unsatisfactory and on 1 September 1943 the programme was cancelled.

Refer also to CG-6
The XCG-6 was a larger version of the XCG-5 and the 15 seat glider had been ordered on 28 June 1941. Following the cancellation of the XCG-5, the XCG-6 was cancelled before construction began. The serial was 41-29620.

Refer also to CG-5
The XCG-7 was a 9-seat troop glider designed by Bowlus but built by Douglas at El Segundo. One aircraft was ordered on 29 July 1941 with serial 41-29621 along with a static test airframe. The static test airframe failed structural tests. The first flight of the XCG-7 took place on 15 July 1942 but the aircraft was found to be overweight. Further development was cancelled in August 1943 and on 25 August 1943 the aircraft was given to the High Voltage Bureau of the National Bureau of Standards for use in studies protecting aircraft from lightning. Alternative data is span: 71'6", 21.79 m, length 36', 10.97 m.

Refer also to CG-8
CG-8
Bowlus

Specifications:
span:  85'8", 26.04 m
length:  61', 18.59 m
max. speed:  120 mph, 193 km/h

(Source: Bill Norton collection)

One XCG-8 was ordered on 29 July 1941 with serial 41-29622 as well as a static test airframe. The 15 seat glider was designed by Bowlus and built by Douglas at El Segundo. It failed structural tests and the programme was terminated in August 1943. The aircraft was kept in storage until it was destroyed on 17 July 1944.

Alternative specifications are span: 90', 27.43 m, length 45', 13.72 m.

Refer also to CG-7
CG-9
AGA Aviation G.5

Specifications:
span: 108'6", 33.07 m
length: 63'11", 19.48 m
max. speed: 150 mph, 241 km/h

(Source: James E. Mrazek, Fighting Gliders of the World)

The XCG-9 was a 30 troop glider. Two examples were ordered on 27 June 1942 with serials 42-56697/56698 but these were not built although a mock-up had been completed and had been inspected. The contract was cancelled on 2 December 1942, by which time Autogyros, Gliders and Airplanes (AGA) had restructured as Gliders and Airplanes (G & A). At the time of cancellation the static test airframe was 55% completed, the first aircraft 5% and the second aircraft only 1%. The aircraft was to be towed by a C-46 or a C-54 and, rather than being shipped in crates, it was the intention to tow it to the battlefield. 20 troops were to be carried in the main fuselage and six in each of the outboard nacelles.

(Source: James E. Mrazek, Fighting Gliders of the World)
The XCG-10 was a 30 seat troop glider of which 2 were ordered on 22 April 1942 with serials 42-53525/53526 along with a static test airframe. The first aircraft was accepted on 4 October 1943 and the first two tow flight took place on 6 November 1943. The second XCG-10 was completed as XCG-10A which could carry 42 troops by adding seats in the center walkway and adding a rear loading door. In addition to the converted XCG-10 it appears another two were built with serials 42-61099/61100 although some reference sources have suggested that these were also originally ordered as XCG-10. It has also been suggested the first XCG-10 was also converted to XCG-10A standards. The first flight was on 6 November 1943. The YCG-10A version was similar to the XCG-10A and although 10 were ordered possibly only 3 were completed. The serials were 45-44450/44459. The CG-10A was a production version of which 990 were ordered with serials 45-44460/45449 but subsequently cancelled although 90 were on the production line. It had been the intention to tow these behind C-54 aircraft and use them for an invasion of Japan planned for November 1945. For this up to 5000 aircraft were envisaged. On 11 June 1948 those XCG-10As and YCG-10As remaining in service were redesignated as G-10A. In 1944 consideration was briefly given to fitting two Pratt & Whitney R-1830-92 engines to the aircraft but this did not proceed. This version was identified as model LK-12.
The XCG-11 was a 30 seat troop glider of which two were ordered on 22 April 1942 along with a static test airframe but cancelled on 9 June 1943 following wind tunnel tests with models. Serials 42-68302/68303 have been associated with this designation.
CG-12
Read York

Specifications:
span: 112', 34.14 m
length: 70', 21.34 m
max. speed: 150 mph, 241 km/h

(Source: James E. Mrazek, Fighting Gliders of the World)

The XCG-12 was a 30 seat troop glider of which two were ordered on 24 September 1942 along with a static test airframe but cancelled on 5 November 1943 following wind tunnel tests with models. A static test article was delivered on 27 July 1943 but it failed structural tests. Serials 42-68304/68305 have been associated with this designation. The contract was initially given to the York Aircraft Corp., which had been established specifically for the construction of this aircraft design. The company was reconstituted as Read-York in May 1943.
The XCG-13 was a 30 troop glider of which two were built by Waco, one by Ford and one by Northwestern. The serials were 43-28245/28246, 43-43864 and 43-43915. The first order was placed on 21 September 1942 and the first flight was on 2 December 1943.

The XCG-13A was a 42-seat development of which one was built by Ford and two by Northwestern. The serials were 43-43865, 43-43914 and 43-43916.

The designations YCG-13 and YCG-13A have also been mentioned for these aircraft.

The production version was the CG-13A and 85 were built by Ford and 47 by Northwestern with serials 43-43866/43913, 43-43917/43963 and 44-85942/85978. Another 268, including serials 44-85979/86241, were cancelled.

Those remaining in service on 11 June 1948 were redesignated as G-13A.

A powered variant, known as type YEU, was not built.
On 27 October 1943 a single XCG-14 was ordered with serial 44-90989 along with a static test airframe. It was constructed from wood and could carry 15 troops. It had a span of 72’3”, 22.02 m and length of 42’6”, 12.95 m and had a tail wheel undercarriage. The first flight was on 1 January 1945.

Although similar in external appearance, the XCG-14A was built of a steel tube structure with plywood covering and featured a nose wheel undercarriage. This additional strength permitted 24 troops to be carried and the first flight was on 16 October 1945. One was built with serial 44-90990.

The XCG-14B version had a span of 71’8”, 21.84 m and length of 53’, 16.15 m and was ordered in January 1946. It was of an all metal construction and was fitted with a ramp. It could carry 30 troops. It is apparent that the designation was changed to XCG-18A shortly before or after completion. The serials of the two aircraft were 46-067 and 46-506 and some sources have suggested that the second aircraft was built as XCG-18A outright. It has also been suggested that aircraft 46-067 was redesignated as XG-14B on 11 June 1948.

*Refer also to C-122, CG-18, PG-4*
CG-15
Waco NEU

Specifications:
span: 62'3", 18.97 m
length: 48'10", 14.88 m
max. speed: 180 mph, 290 km/h

A single XCG-4A was converted as the XCG-15 prototype. The serial was 43-37082 and it was ordered on 14 October 1943. Flight tests began in February 1944. Two XCG-15As, to which the specifications apply, were ordered in May 1944 and built with serials 44-90987/90988. The first flight was on 25 October 1944. This was followed by 427 CG-15A production aircraft which were ordered on 21 September 1944 with serials 45-5276/5660 and 45-12743/12784. Some of these may have originally been ordered as CG-4A. It was originally intended for Northwestern and Ford to also construct CG-15As but, eventually, Waco was the only manufacturer. A batch of 573 aircraft with serials 45-12785/13232 was cancelled. Those that remained in service on 11 June 1948 were redesignated as G-15A. In 1947 six aircraft were converted for use in the arctic regions.

Refer also to CG-4, PG-3, LR2W
General Airborne MC.1A

Specifications:
span: 91’10”, 28.00 m
length: 48’3”, 14.71 m
max. speed: 220 mph, 354 km/h

The XCG-16 was a 42 troops lifting body type of glider designed by W.H. Bowlus and presented to the USAAF as an unsolicited proposal in December 1942. The design was based on the A-1 bomber project designed by Burnelli in 1935. In 1943 a factory owned MC.1 NX21757 was evaluated against the CG-13 following which 2 XCG-16s were ordered on 8 November 1943 with serials 44-76193/76194 of which only the first one flew after delivery on 25 July 1944. It was known as model MC.1A (sometimes referred to as MC.2). After 34 hours of flight, including tests between 16 and 22 October 1944, the programme was cancelled on 30 November 1944. The XCG-16 was found to be too heavy for a C-47 tow aircraft and would have required a C-46 tow aircraft, whilst the pilot position had restricted visibility. The USAAF judged the aircraft as operational and technically unsuitable.
The second aircraft, a model MC.1B, was never completed.
The designation XCG-16A was a development with a re-arranged pilot position.
Large scale production was envisaged by a Bowlus-Griz company.
In June 1944, as a result of the requirements for the war in Burma, a C-47A with serial 41-18496, was tested as a glider with the designation **XCG-17**. The engines were removed and fairing placed over the engine pods. In tests it was found that the speed was less than that for the Waco CG-4 and the project was abandoned. The aircraft was converted back to C-47A configuration.

In January to June 1946 another C-47 (43-16229), named The Nez Perce, was converted as a glider as a field maintenance exercise in Manilla, Philippines. The aircraft was later converted back to its original configuration and there is no evidence to suggest that the aircraft was re-designated as CG aircraft.

*Refer also to C-47, C-48, C-49, C-50, C-51, C-52, C-53, C-68, C-84, C-117, C-129, R4D*
CG-18
Chase MS-6

Specifications:
span:  86'4", 26.31 m
length:  53'5", 16.28 m
max. speed:  180 mph, 290 km/h

Based on the USAAF’s MX-877 one XCG-18 as well as a static test airframe, were ordered on 24 January 1946. These aircraft were not built, instead two XCG-18A prototypes were ordered later in 1946. Based on the XCG-14B they had a span of 71'8", 21.84 m and a length of 53', 16.15 m. The first flight was on 18 December 1947.
These aircraft were not built, instead two XCG-18A prototypes were ordered later in 1946. Based on the XCG-14B they had a span of 71'8", 21.84 m and a length of 53', 16.15 m. The first flight was on 18 December 1947.
The known serials for these aircraft were 46-067, 46-506 and 46-507 with some references stating that the serial 46-067 was assigned to the XCG-18A and that 46-507 was cancelled.
The XCG-18A version, to which the specifications apply, was ordered on 5 March 1948 with serials 47-640/644 and the first flight was on 24 June 1947. They were redesignated as YG-18A on 11 June 1948 and aircraft 47-641 was converted as YC-122 although some reference sources state it was completed outright as such.
Production of 147 aircraft was envisaged but did not take place.

Refer also to CG-14, C-122
CG-19
Douglas 1028

Specifications:
span: 110', 33.53 m
length: 77', 23.47 m
max. speed:

(Source: James E. Mrazek, Fighting Gliders of the World)

Based on USAAF project MX-878, two examples of the CG-19 were ordered on 11 January 1946. A mock-up was built and was 60% complete when the programme was cancelled in March 1947. Other sources give the span as 85', 25.91 m and the length as 61', 18.59 m.
Based on USAAF programme MX-879, the XCG-20 was a 67 troop glider of which 2 prototypes were ordered on 2 December 1946 with serials 47-786/787. They were redesignated as XG-20 on 11 June 1948 and the first flight took place on 14 October 1949. The two aircraft were eventually converted as XC-123 and XC-123A although it is possible that 47-786 was completed as XC-123 outright.

Refer also to C-123