

To: All Aircraft Design Group Members (reference routing #44a)
From: Alan Estenson, Chief Engineer
Re: New high priority glider design project.

ASE Aircraft Co. has recently been awarded a contract from the government of Elbonia to develop what Marketing is calling “an economical, environmentally friendly, unpowered aerial machine composed of indigenous materials for the perusal of the enjoyment-seeking segment of the population.”

In engineering terms, it’s a toy wooden glider.

All engineering groups are to take on this project; put all others on temporary hold. Bill your time and materials to budget number ELB1138.

The three immediate project phases are: design, construction, and testing. Each group should design its own glider using the “Aery” computer program. A flying prototype will then be constructed and test-flown by each group. Furthermore, all groups should be prepared to present their glider and its test results in brief oral presentations. Ultimately, one design will be chosen to be presented to the Elbonian government. If several promising designs result from the team efforts, a fly-off may be held to further evaluate glider performance.

Project Requirements

- Glider (unpowered).
- Balsa and spruce wood construction.
 - Keep sizing within standard Elbonian board lengths.
 - Balsa - 120 cm, Spruce - 91 cm.
- Acceptable flying performance per AACTR#121703.
- Design for manufacture - simple and quick construction.
- Economical - minimize excess materials.

Specifications

- Left to development by individual groups under the following guidelines.
 - No swept flying surfaces - keep them straight or tapered.
 - Wherever possible, use one-piece, solid, flying surface designs.
 - Preferred bonding agent is cyanoacrylate adhesive.

I’m looking forward to seeing your best work on this project.