Introduction
Luffships Ltd is an R&D business for new lighter-than-air (LTA) aircraft (aerostats and airships) intended to fulfil operators’ needs internationally without so much cost and bother of traditional aerostats (balloons, free floating or tethered) and airships (dirigible LTA aircraft).

We also are mindful of commerce and the need for networked infrastructure suitable against adverse weather, so have compatible ground facilities and other designs (shelters) with a strategy for their development in harmonious ways minimising disturbance.

Our aspirations are to enable aerial services in compatible ways anywhere, only dreamt about at the moment, such as:

- Aerial platforms and dirigible types with exceptional endurance aloft (weeks, months).
- Wide ranging quiet aerial rovers (LTA drones) & patrollers (manned airships) for endless survey and support duties anywhere.
- Air transport of practically anything using natural conveyance methods (winds) and means for power that harness the atmosphere (rather than harm).
- Aerial cranes with precision control (enabling construction) for seriously heavy outsized payloads providing point A to B services anywhere – without landing.
- Aerial cruise liners for unhindered joy of air travel and the natural wonders of our world.

To enable these possibilities we work with aircraft specialists, producers, operators, etc, who know the business and the airworthiness authorities in structured ways from the ground up.

It’s also recognised that suitable infrastructure (airports, equipment and facilities) need development. We thus also work to enable a broad network of international ground infrastructure arrangements tailored to local environments that provides protection against adverse weather/climate conditions.

Summary
As LTA aircraft engineers with significant airship design experience since c1980 we understand the issues concerning their development and operation. We also understand their history, where it’s clear the industry needs better ways for success. In addition, as inventors/innovators with know-how, we want to help create better ways for people to live. Embracing young people with verve and fresh ideas for new technology also is our way – enabling their future.

From consideration of past doings we have a strategy for the development of new arrangements that scale up from small projects when the time is right to provide bigger sizes. We therefore have numerous designs that are readily doable, fun and enable small operators to set up. As we and the operators become able to manage bigger projects, these then will go ahead. This also will enable new technology that doesn’t exist yet (e.g. rapid response vectored thrust) necessary for success.

Our plan is to grow in manageable stages, developing capability leading to LTA aircraft able to serve serious needs currently very difficult to otherwise fulfil without huge cost, such as:

- Providing people in urgent need of supplies who are starving, freezing and/or suffering from the circumstances they find themselves in - out of reach by other ways.
- Watching over vast areas with interactive capability and lasting endurance to provide immediate help when needed plus to call in and work with other services for support.
- Serving industrial needs with pin-point accuracy (like helicopters) practically anywhere, but for seriously heavy-lift operations with lasting endurance.

To fulfil these purposes we have a range of LTA aircraft designs, needing finance, political and public support for development. We thus seek subscribers to help make them possible.
Offerings

Instead of just more of the same we offer new types with enhanced capabilities, particularly omni-
directional airships that enable:

- Zero to moderate airspeed, enough to make headway against normal winds.
- Very long endurance – days or weeks and potentially months underway.
- Vertical ascent/descent with seriously heavy loads and associated stable geostationary positioning with controllable heading able to lift and place them.
- Low noise, vibration, emissions and environmental impact.
- Unobstructed viewing or scanning all around for various purposes.
- Reliability with low acquisition, operating and maintenance costs, plus long service life with high utilisation.
- Little need for associated ground infrastructure (no runways or hangars) and ability to access small ground locations in difficult territorial regions.

Goals

1. Become profitable (securing the business) with readily doable projects including: inflatable structures, LTA drones and captured aerostats; each enabling particular aspects and new technology. They also are to develop team skills and cooperation with suppliers; gain airworthiness approvals necessary for later manned aircraft developments; and to cultivate relationships with operators who will need training and supply.

2. Develop, certify and enable sales of series airships under Balloon/Normal category regulations for various ‘small aircraft’ purposes, providing operators with ways to extend aerial services between bases that they arrange.

3. Follow with further development of medium sized aerial cranes for 5 tonne payloads and passenger airships under existing Commuter category rules; enabling operators to expand their services and further facilitate the infrastructure needed for bigger types.

4. Develop large Aerial Cranes for 50 tonne and 150 tonne payloads plus Cruisers under Transport Category regulations when the circumstances allow, which also may be configured to serve in other serious ways.

Objectives

Attain goals 1 and 2 within a 2 to 3 year period, leveraging things already undertaken. Achieve goal 3 within a further 5 years, after which the technology should be accepted to follow through for goal 4. Provide technical support services for producers, suppliers, operators, maintainers and people who want reliable LTA Solutions.

Enable business sustainability from sales and technical services income within 2 years.

Benefits

By way of examples:

- Operators will benefit from affordable products and services with better deployment suiting their needs involving fewer crew and easier ways to securely manage their assets compared with traditional airships.
- Local communities will benefit from employment opportunities and the aerial services enabled, facilitating transport and trade – especially people in isolated places with poor infrastructure.
- National organisations will benefit from affordable ways to provide persistent coverage over regions otherwise difficult to consistently watch over.
• Industry, agriculture, forestry, earth resource suppliers, etc, will benefit from point to point ways for delivery and extraction directly.

**Investment**

Investment in Luffships’ proposals is a way to provide sustainable aerial services that don’t pollute our atmosphere or waste finite resources (as jets do) enabling better ways for our children’s future.

**Contact**

To see more about Luffships’ projects and perhaps read associated documents available, see our website: luffships.com

For more information about the exciting possibilities offered or to register support for our goals, either:
write to us as below or call us at: +49 (0)35477 4969
or send an e-mail to: info@luffships.com

We hope you enjoyed learning about us and would like to become a subscriber receiving interesting information about LTA aircraft and to follow our progress.

Artificial reality image depicting Luffships’ technology

![Artificial reality image depicting Luffships’ technology](image.png)

For:
- Border patrol
- Offshore activities
- Drones activity support
- ISR

An Omni-directional (O-D) airship design
Manned or Unmanned
for sustained, low altitude Earth Observation

**Note:**
SkyLifter Ltd now is Luffships Ltd
and, through collaboration,
the SkyLifter website independently promotes Luffships’ designs.

**Collaboration** is a way that enables us and our shared objectives. We also collaborate with:
Skymined LLC, i-FX Media Ltd, Airborne Industries Ltd, Skylaunch Ltd, Cenozai Sdn Bhd, Strand Aerospace Malaysia Sdn Bhd, Tindale Systems

Well?