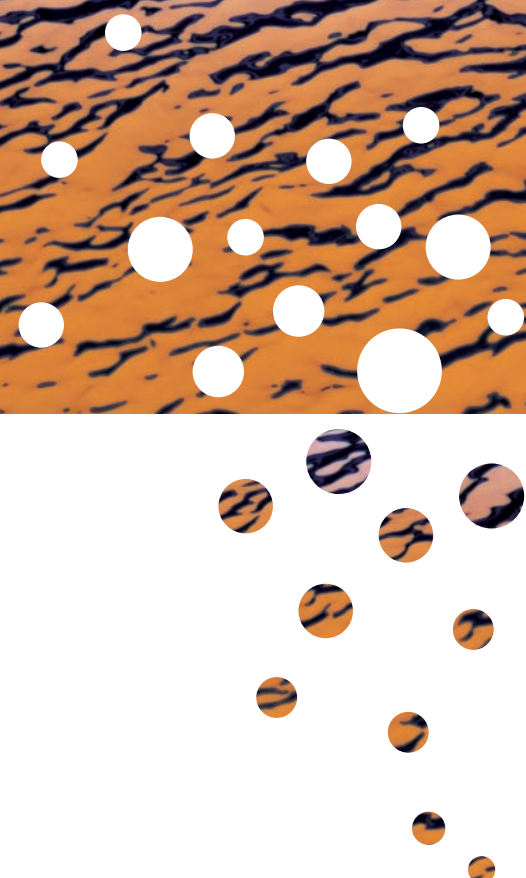
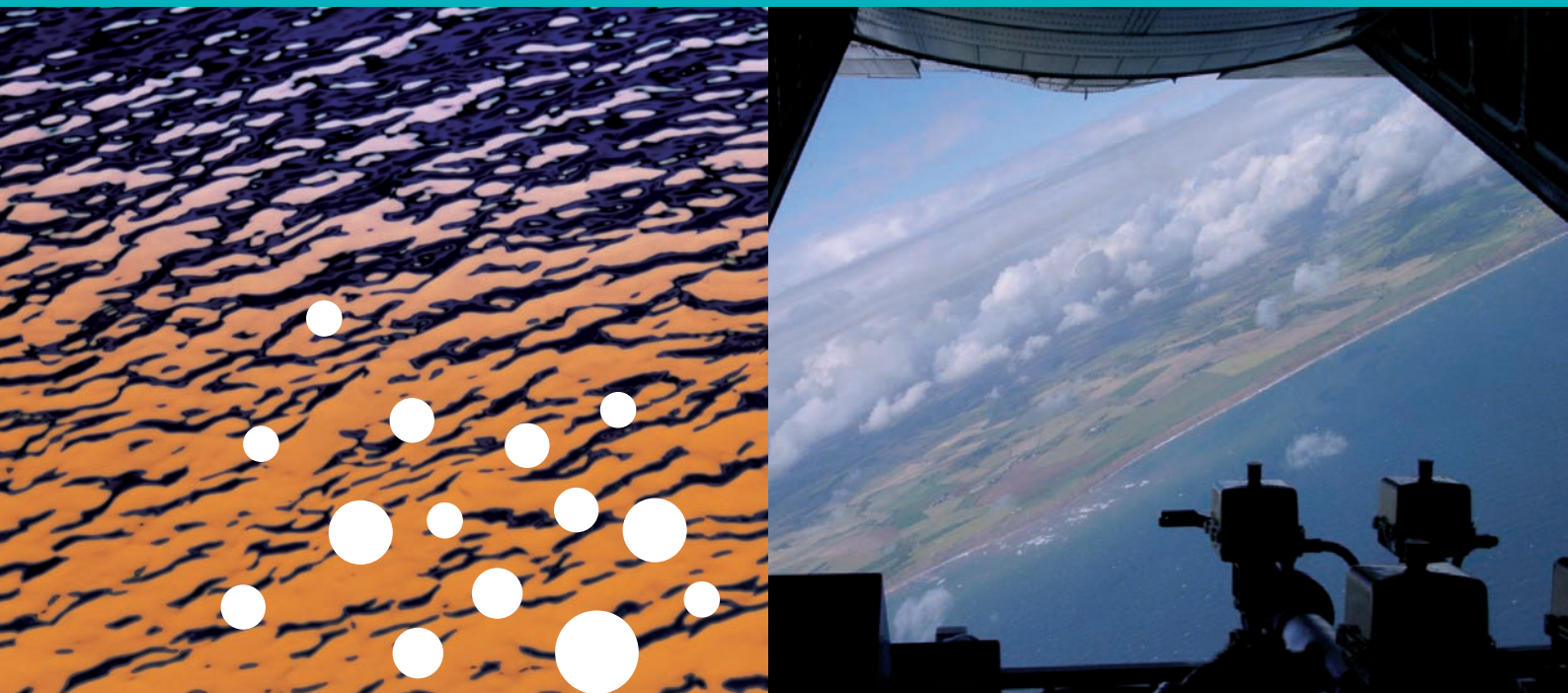




NIMBUS L-382



**MODULAR
AERIAL
DISPERSANT
SPRAY SYSTEM**

NIMBUS L-382



Product Description

NIMBUS is a modular aerial dispersant spray system which is designed for operation from aircraft with a rear cargo ramp which can be opened in flight. The system is currently certificated by the US Federal Aviation Administration (FAA) and the European Aviation Safety Agency (EASA) and Transport Canada Airworthiness Authorities for operation in the Lockheed L382 “Hercules” aircraft. The NIMBUS system, which comprises up to 4 tank modules (total capacity of 12,000 litres) and a combined pump/spray arm module, can be installed in the aircraft and loaded with dispersant in under 2 hours. The system utilises the aircraft electrical power supply and no modifications to the aircraft are required. The NIMBUS design is now being adapted to allow operation from other transport aircraft such as other Hercules models and the Alenia C-27J Spartan.



Features

- **Modular Design for Easy Installation and Transportation**
- **2, 3 or 4 Tank Options with up to 12,000 litre Capacity**
- **FAA & EASA Certification for L-382G Hercules Aircraft**
- **Bare Floor or Roller Floor Installation**
- **Pressure or Gravity Fill**
- **Low Profile, 3000 litre Capacity Tank Modules**
- **Ramp Mounted Combined Pump/Spray Arm Module**
- **Retractable Spray Arms**
- **Utilises Standard Aircraft Electrical Power**
- **Optional Automated Flow Control with Touch-Screen Operation**
- **Spares and Ground Support Equipment Packages**
- **NIMBUS Operator and Maintenance Courses**

Intelligent solutions to oil pollution problems



Technical Specification

Performance

Dispersant Capacity:	Up to 12,000 litres (3170 USG) depending on aircraft
Flow Rate:	Up to 1300 LPM (343 USG/min)
Effective Swath:	Up to 15m (50ft)
Application Rates:	80 – 100 Litres/Hectare (9 – 10 USG/Acre)
Area Treatment Rate:	Approx 10 km ² /hr (4 sq. miles/hr)

Tank Module

3000 Litre Capacity, 316 Stainless Steel Low Profile Fabrication, Inspection/Gravity Fill Hatch, Level Indicator, Vent, Drain and Flow Control Valves, Ground Handling Features and Fork Pockets, Inter-Tank Hoses, Tie Down Ratchet Straps and Integral 463L Pallet.

Spray Arm/Pump Module

Aluminium Base Frame, Electrically Powered Centrifugal Pump Recirc., Flow Control, Drain and Dump Valves, Control Panel, Wiring Loom with CB Box, Retractable Spray Arms, Ground Handling Features and Fork Pockets.

Documentation

Installation, Operating and Maintenance Manuals.

Quality Control

Designed and Manufactured under a BS EN ISO 9001 Quality Management System and an EASA JAR 21 Production Approval.

Certification

All NIMBUS aircraft installations will require Supplemental Type Certification from the appropriate Airworthiness Authority in order to install and operate the system in an aircraft.

NIMBUS already has FAA and EASA STCs for the Lockheed L382 "Hercules" aircraft. Other STCs or equivalent certification are obtained as required by the aircraft operator.

NIMBUS L-382

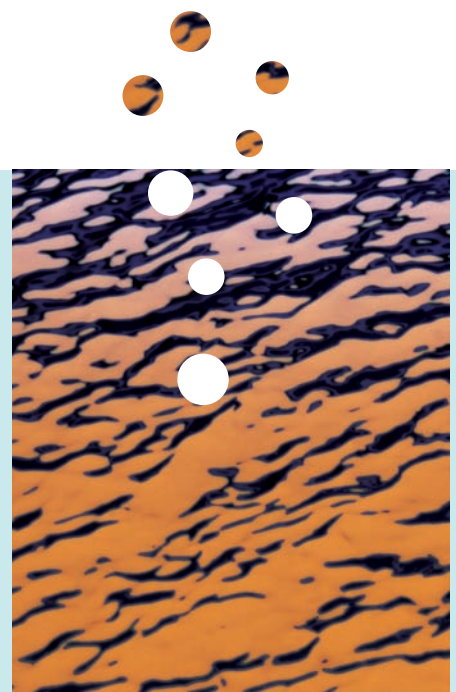
System Benefits

- Modular Design for Easy Transportation
- Flexible Installation Options with 2, 3 or 4 Tank Fit
- No Aircraft Modification Required
- Excellent Operational Performance and Flexibility
- System Design can be adapted and certificated for other Aircraft

Options

1. Automated CG Control with Touch Screen Operation
2. Recommended Spares Kit
3. Logistics and Ground Support Package
4. Flight Crew and NIMBUS Crew Training Courses

NIMBUS L-382



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Description of Options

1. Automated CG Control with Touch Screen Operation

For 4-Tank NIMBUS installations it may be necessary to automatically control the flow of dispersant from each tank in order to keep the aircraft within CG limits. If this is necessary, NIMBUS can be supplied with an automated CG Control and a Touch Screen which illustrates tank levels and also provides stop/start control and flow control. This degree of control is generally not necessary for 2 or 3 tank installations.

2. Recommended Spares

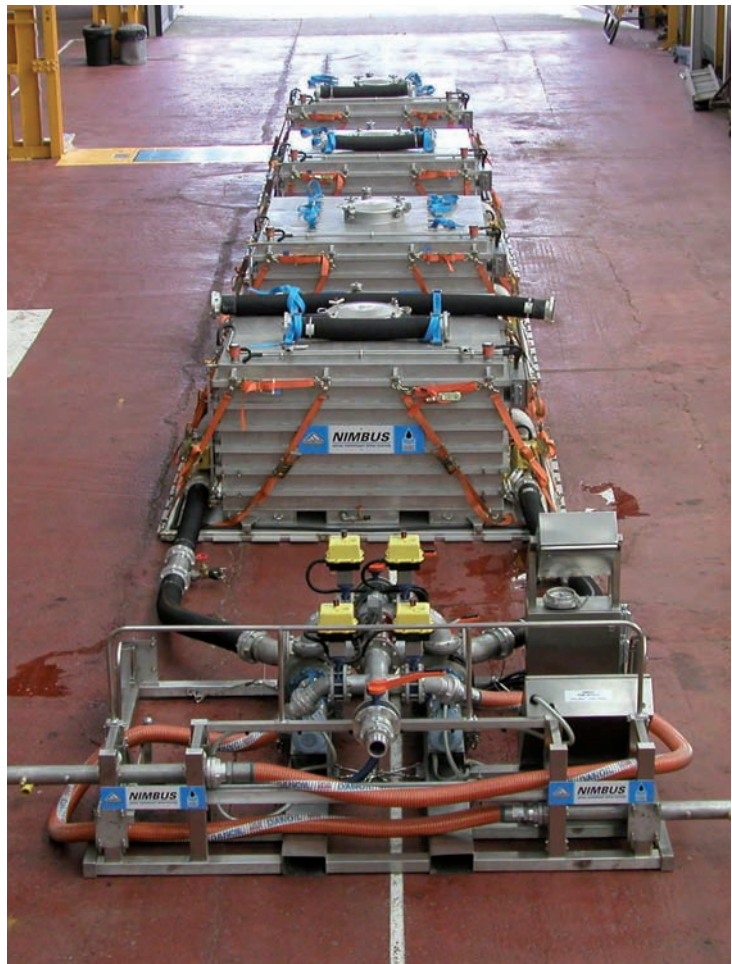
A comprehensive set of spares is supplied with NIMBUS system. Some spares are very long lead time items (eg motors and pumps) and are essential for adequate spares support.

3. Logistics and Ground Support Package

There a number of items of Ground Support Equipment which are required to load dispersant, store the system etc and these items can be supplied in the package.

4. Flight Crew and NIMBUS Crew Training Course

Aircraft Flight Crew and the Rear Crew (Loadmaster and NIMBUS Crew) will need to be trained to install, load, operate, remove and maintain the system safely and effectively. These courses are provided by Ayles Fernie.



For more details of other Ayles Fernie products please contact us.

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Ayles Fernie is committed to the on-going development of its products and product details may change from time to time. This product leaflet should be used as a guide only and Ayles Fernie will be pleased to provide specific and up to date technical information as required.

July 2009

