

DNLD



Dynamic Non-Linear Display



Key Features

- Instant situational awareness
- Display scales are dynamically and non-linearly modified to enable display of current value and predefined upper and lower limits
- · Increased focus on current value
- Reduced distraction
- Adaptable display algorithm
- Eliminates unwanted roll cues from altitude and speed tapes commonly experienced in highly dynamic situations

Applications

- Aircraft cockpits civil & military
- Unmanned Vehicle Control
 Station displays
- Military land and sea vehicles
- Simulation displays
- Operations / Industrial
 Process / Transportation
 System Control Rooms
- Any wide-scale range that requires dynamic legibility

Overview

The Dynamic Non-Linear Display (DNLD) is an innovative display technology designed to present complex data in a visually intuitive manner. It enhances situational awareness by allowing users to interact with data in real-time, making it ideal for aviation and other industries requiring high levels of information processing in a rapidly changing environment.

Dynamic Non-Linear Displays (DNLD) were developed to reconcile the mutually conflicting demands affecting EFIS and HUD tape displays for dynamic legibility, wide scale-range, and adequate precision. For example, traditional tape altimeters typically limit their analog displayed range to ±300 ft in order to maintain the necessary 20 ft resolution.

Multiple flight evaluations have shown that DNLD satisfies all three display requirements, while maintaining full scale linearity in the fine-control region. DNLD displays exhibited no discontinuities, remained legible at extreme aircraft rates, and never went out of range (so DNLD altimeters, for example, always kept the underlying terrain elevation in view).



Benefits:



- Display range AND resolution
- Current value criticality
- End points retention
- On screen meaningful display
- Vectors remain useable in highly dynamic situations
- Eliminates false roll cues
- Easy integration into existing displays



About Marinvent

Marinvent is a privately held Canadian company that was founded in 1983. Marinvent is headquartered on the outskirts of Montreal, the leading aerospace center in Canada and one of the largest aerospace centers in the world.

Marinvent exists to innovate in aerospace, particularly in the areas of safety, human factors optimization and certification. It undertakes its own research and development and collaborates with others to create valuable aerospace intellectual property aimed at reducing customers' program/product risk, cost and schedule, helping them to innovate quickly.

Marinvent is a reliable and trusted partner for cutting edge collaborative research with companies large and small across Canada and beyond. Marinvent makes its own tools, test equipment and IP available to its customers and research partners under license. Marinvent is particularly experienced in leveraging available provincial and federal government funding assistance in order to minimize the private investment required to innovate. Marinvent's customers include aircraft OEMs, integrators, tier 1s, tier 2s and government customers around the world.

Marinvent prides itself in helping its customers bring their products to market and has a stellar track record of doing exactly that.

Awards

- Canadian American Business Achievement Award For leading a joint enterprise demonstrating strong business growth, remarkable innovation, noteworthy contributions to local communities and the capacity to provide their partners with a global advantage
- Canadian Aeronautics & Space Institute: Trans Canada (McKee)
 Trophy Canada's oldest and most prestigious aeronautical trophy
 awarded to Marinvent for the Canadian whose achievements were
 most outstanding in promoting aviation in Canada
- Aviation Week & Space Technology Laureate "...helping to transition from paper in the cockpit to a digital flight deck."
- Canadian Business Aviation Association Industry Award (x2) Outstanding contribution to aviation. And, for the safety gains achieved through human factors enhancements, systems engineering and flight test services
- Aerospace Association of Quebec (AQA) Prix de l'Entreprise
- Create the Future Award APM product winner

- National Aeronautics and Space Administration (NASA) Small Business Subcontractor of the Year (TASAR)
- AIAC James C Floyd Award Aerospace Company of the Year
- New Zealand Ministry of Defense Award of Excellence to Industry Marinvent singled out as one of the two most valuable contractors
 from a pool of more than 800 contractors for contributions to C-130
 LEP and P-3K capital programs
- C2-MTL Annual Aerospace Award Marinvent's work on unmanned aerial systems flight test and evaluation with its Piaggio Avanti project singled out as aerospace innovation of the year
- National Aeronautics and Space Administration (NASA) LaRC 2014 Group Achievement Award
- Canadian Defense Executive of the Year Dr. John Maris
- Canadian Aviation Hall of Fame Dr. John Maris
- Canadian Defense Review Top 50 Defence Companies 2015-2024

