

LOOKING INTO THE FUTURE

WITH CLEARVISION SYSTEM





ATR'S INNOVATIVE SOLUTION

FOR LOW-VISIBILITY OPERATIONS

Designed for low-visibility and night conditions, the ClearVision™ system offers optimised Head-Up capabilities coupled with Enhanced and Synthetic Visions

PRIMARY OPTION



SKYLENSTM



Flight guidance symbology and runway highlighting



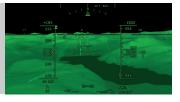
SKYLENS™ Head-Mounted Display (HMD) for an unlimited field of vision

ADVANCED VISION OPTIONS

SKYLENSTM

Synthetic Vision System (SVS)

Generates images of terrain and obstacles from a database





SKYLENSTM

Enhanced Vision outside view in System (EVS)

Displays augmented real-time through the use of a camera

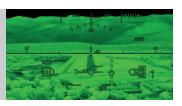


Camera equipped with multi-spectral sensors on aircraft nose

SKYLENSTM

Combined Vision SVS images for System (CVS)

Combines both EVS and outstanding vision





March 2017

System integration on ATR test aircraft

Summer 2019 Entry Into Service

PROVEN ECONOMICAL AND OPERATIONAL BENEFITS

- Less delays, diversions and cancellations
- Compatible with GNSS-based approaches
- No additional airport facilities required

BENEFITS

PRIMARY OPTION

SKYLENS™ allows identical operational credits as classical Head-Up Displays

- Assistance in decision making during take-off, approach and landing
- Credit at take-off and landing by reducing RVR

SKYLENS™ + SYNTHETIC VISION SYSTEM (SVS)

SKYLENS™ + SVS allow a greater awareness of terrain in clouds, mountainous areas and during night flights

Facilitates operations for difficult or unfamiliar airports

SKYLENS™ + ENHANCED VISION SYSTEM (EVS)

SKYLENS™ + EVS offer a unique and optimised solution for regional aviation

- Augmenting natural vision to aid decision making
- Unprecedented situational awareness in harsh weather conditions
- Additional credit at landing by further reducing RVR

APPROACH WITHOUT **VERTICAL GUIDANCE**

VOR/DME GNSS (LNAV)

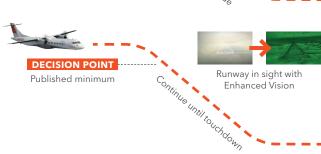
Credit down to 100 ft

Runway in sight with **Enhanced Vision DECISION POINT** Published minimum natura

APPROACH WITH **VERTICAL GUIDANCE**

ILS CAT I / II Baro-VNAV LPV

Credit until touchdown and rollout RVR lowered to 1,000 ft



GLOSSARY:

Baro-VNAV: Barometric Vertical NAVigation

CVS: Combined Vision System

DME: Distance Measuring Equipment

EVS: Enhanced Vision System

ft: Feet

GNSS: Global Navigation Satellite System

HMD: Head-Mounted Display ILS: Instrument Landing System LNAV: Lateral NAVigation

LPV: Localizer Performance with Vertical guidance

RVR: Runway Visual Range SVS: Synthetic Vision System VOR: VHF Omnidirectional Range



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