

CHANGE ISSUE

ASA MASPS REV -

Tracking Information (committee secretary only)	
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Short Title for Change Issue:	“Degraded Target Utility” Indicator
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MASPS Document Reference:		Originator Information:	
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Table/Figure number(s)		Other	UPS Aviation Technologies

Proposed Rationale for Consideration (originator should check all that apply):	
	Item needed to support of near-term MASPS/MOPS development
X	ASSAP & CDTI MOPS
	DO-260A 1090 MHz ADS-B/TIS-B Data Link MOPS
	DO-242B ADS-B MASPS
	TIS-B MASPS
	DO-282A UAT MOPS
	Item needed to support applications that have well defined concept of operation
	Has complete application description
	Has initial validation via operational test/evaluation
	Has supporting analysis, if candidate stressing application
	Item needed for harmonization with international requirements
X	Item identified during recent ADS-B development activities and operational evaluations
	MASPS clarifications and correction item
	Validation/modification of questioned MASPS requirement item
	Military use provision item
	New requirement item (must be associated with traffic surveillance to support ASAS)

Nature of Issue:		Editorial		Clarity		Performance	X	Functional
<u>Issue Description:</u>								
<p>Should the ASA MASPS require that the CDTI be capable of displaying an indication (for example, a special target icon) that a particular target has degraded utility for the currently selected “coupled” application, or for the least demanding “background” application (such as Enhanced Visual Acquisition or Airport Surface Situational Awareness) if no “coupled” application has been selected?</p> <p>For the situational awareness applications (EV Acquisition, ASSA) the “degraded target utility” indication would inform the flight crew that the relative bearing of a target may not be exactly as indicated on the CDTI display. (The crew is warned, therefore, to extend their visual search for such a target.)</p> <p>If a coupled application has been selected, the “degraded target utility” indication would inform the flight crew that a target does not qualify for the coupled application, and cannot, therefore, be selected as the “selected target.”</p>								

Originator's proposed resolution:

Do make “degraded target utility” indicators a requirement that the ASA MASPS levies on the CDTI MOPS (and, therefore, on individual CDTI designs). Permit the CDTI and ASSAP application designers to decide what symbol would be used to indicate a target of degraded utility, and whether to use a single symbol for this purpose, or multiple symbols according to the type of degradation. (One symbol might be used to indicate that a target cannot be selected for the current “coupled” application, and another to mean that the target’s relative bearing is uncertain.)

Working Group 4 Deliberations:

2002-10-23, during the meeting at NASA Ames:

WG-4 began to discuss this issue the first day of the meeting (Wednesday afternoon), in connection with a presentation by Joel Wichgers. The working group **agreed** to the use of a “degraded target” indication for use with the applications of Airport Surface Situational Awareness and Enhanced Visual Acquisition. Consideration of the “degraded target” symbol for the more advanced “coupled” applications was deferred for the following day’s discussion.

2002-10-24, during the meeting at NASA Ames:

Bob Hilb claimed that WG-4 had agreed at Brussels to the following language: “The crew shall be informed of any operating application that is not available for any specific target.” Ken suggested that this be re-worded as “For any coupled application, the crew shall be informed of any displayed targets that for which that application is available (or is not available). For background applications, the display shall indicate displayed targets that have degraded information or for which the background application is not available.” WG-4 **agreed** to this wording.

An open issue remains: “Should the flight crew be permitted to de-select the situational awareness application?”

April 22, 2003: This Issue Paper was reviewed and discussed y WG4 at the WG4 meetings held April 22 & 23, 2003 at RTCA, Inc. It was agreed by WG4 that the material being drafted for §3.3.3 will address the MASPS level requirements for this Issue Paper. This Issue Paper is therefore considered CLOSED. It was also agreed that a new Issue Paper (IP10) will be drafted to address the de-selection of situational awareness applications.