



CANEW 2010
VICTORIA, BRITISH COLUMBIA, CANADA

NMS - AIR TRANSPORTATION PACKAGE REVISION

ARCHITECTURAL AND ENGINEERING RESOURCES
PROFESSIONAL AND TECHNICAL PROGRAMS
REAL PROPERTY SERVICES
ONTARIO REGION, CANADA

September 21, 2010



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



Background

- **Government Master Specifications (GMS).**
- **National Master Specifications (NMS).**
- **Division 16 for electrical including airfield lighting, five-number format sections.**
- **Master Format 2004, six-number format with two-number extension.**
- **Division 26 for electrical and Division 34 for transportation.**
- **Airfield lighting: Division 26 and Division 34.**
- **New Master Format 2010 for next revision.**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



Revision of Air Transportation Package

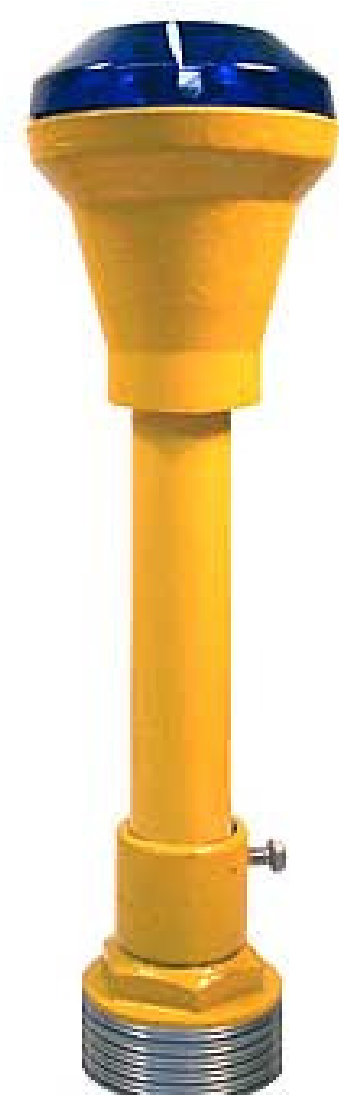
- **No major revision since 1997.**
- **List of approved equipment: not valid.**
- **Outdated equipment and systems.**
- **New lighting technology: LED.**
- **New methods of installation: directional boring for inset lights and more.**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada





Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



Working Team

- **NMS Secretariat: Michel Theauvette.**
- **PWGSC: Ty Huynh.**
- **Transport Canada: Ed Alf.**
- **DND: Bob Chernish.**
- **Consultation: airports, manufacturers, consultants and tower owners.**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



What's New

- **Removal of all lists of approved equipment.**
- **Equipment to meet TP312 Standards and CAR 621 Standards (obstruction lights).**
- **Manufacturers to provide attestation from established third party testing laboratories such as ETL.**
- **Airports to choose to accept photometric data identical to TP312 standards from non-Canadian state standards (FAA, ICAO etc.).**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



TP 312 – CAR 621



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada 



FAA - AC150 Series



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



ICAO Annex 14 – Chapter 5



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



What's New

- **Removal:**
 - **Outdated, not available equipment.**
 - **Outdated systems: VASI, LIA and HIA.**
- **Name Change:**
 - **Change of names to many sections to more familiar terms in aviation industry.**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



What's New (cont' d)

- **Addition:**
 - **LED lights: runway edge lights (except high intensity), taxiway edge lights, centre line lights, touchdown lights, inset guard lights, guidance signs, and obstruction lights.**
 - **Touch-screen panel for PLC airfield lighting control.**
 - **Cat II Approach System: ALSF II.**
 - **Elevated Runway Guard Lights.**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



Division 26

- **26 12 19.13 PAD-MOUNTED TRANSFORMERS FOR AIRFIELD VISUAL AIDS – Update “Reference Standards”.**
- **26 55 36.13 RED HAZARD BEACONS – New name “ M.I. RED FLASHING OBSTRUCTION LIGHTS’.** Delete “Approved Equipment”. Add attestation to meet CAR 612 Standards.
- **26 55 36.16 OBSTRUCTION LIGHTING – New name “ L.I. RED OBSTRUCTION LIGHTING”.** Delete “Approved Equipment”. Add attestation to meet CAR 612 Standards.
- **26 56 14 ALUMINUM TOWER ASSEMBLY AND ERECTION – Moved Division 34 and renamed. New number 34 43 16.39.**
- **26 55 36.16 M.I. WHITE FLASHING OBSTRUCTION LIGHTING - Delete “Approved Equipment”.** Add attestation to meet CAR 612 Standards.





Division 34

- **34 43 05 AIRFIELD LIGHTING - GENERAL – New name “COMMON WORK RESULT FOR AIRFIELD LIGHTING” Update reference standards. Add ALSF II and Runway Guard Lights. Delete VASI, HIA & LIA.**
- **34 43 10 AIRFIELD ILLUMINATED GUIDANCE SIGNS - Add attestation to meet TP312.**
- **34 43 13.13 AIRFIELD RUNWAY IDENTIFICATION LIGHTS - Add attestation to meet TP312.**
- **34 43 13.16 AIRFIELD RUNWAY AND TAXIWAY INSET LIGHTING – Add attestation to meet TP312. Add directional boring method.**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



Division 34 (cont' d)

- **34 43 13.19 AIRFIELD ELEVATED EDGE LIGHTING - Add attestation to meet TP312.**
- **34 43 16.19 AIRFIELD VISUAL APPROACH SLOPE INDICATOR - VASI EQUIPMENT - Deleted.**
- **34 43 16.23 AIRFIELD SHORT-APPROACH LIGHTING SYSTEM – Add attestation to meet TP312.**
- **34 43 16.26 AIRFIELD OMNI-DIRECTIONAL APPROACH LIGHTING SYSTEM - Add attestation to meet TP312 and alternate power source (parallel).**
- **34 43 16.29 AIRFIELD LOW INTENSITY APPROACH LIGHTING – Deleted.**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



Division 34 (cont' d)

- **34 43 16.34 AIRFIELD HIGH VARIABLE INTENSITY APPROACH LIGHTING EQUIPMENT – Deleted.**
- **34 43 16.36 AIRFIELD PRECISION APPROACH PATH INDICATOR - Delete “Approved Equipment”. Add attestation to meet TP312.**
- **34 43 16.39 AIRFIELD ALUMINUM APPROACH TOWERS – Moved from Division 26 and renamed. Add reference to ALSF II.**
- **34 43 23.16 AIRFIELD WIND CONES – New name “AIRFIELD WIND DIRECTION INDICATORS”. Delete “Approved Equipment”. Add attestation to meet TP312.**
- **34 43 23.19 ROTATING BEACONS – New name “AERODROME BEACONS”. Add attestation to meet TP312.**





Division 34 (cont' d)

- **34 43 23.43 AIRFIELD APRON FLOODLIGHTING - Add attestation to meet TP312 and quartz re-strike lamp.**
- **34 43 26.13 AIRFIELD LIGHTING CONTROL EQUIPMENT - Delete “Approved Equipment”. Add NAVCan’s NC2004-18E.**
- **34 43 26.16 AIRFIELD LIGHTING PLC CONTROL EQUIPMENT – Add touch-sreen panel and NAVCan’s NC2004-E.**
- **34 43 26.23 AIRFIELD LIGHTING REGULATOR ASSEMBLY - Delete “Approved Equipment”. Add references to FAA-AC 150/5345-10F and IEC 61822 .**
- **34 73 16.13 AIRCRAFT STATIC GROUNDING – No change.**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



Division 34 (cont' d)

DELETED/ MOVED SECTIONS

- **34 43 16.19 AIRFIELD VISUAL APPROACH SLOPE INDICATOR - VASI EQUIPMENT - Deleted.**
- **34 43 16.29 AIRFIELD LOW INTENSITY APPROACH LIGHTING – Deleted.**
- **34 43 16.34 AIRFIELD HIGH VARIABLE INTENSITY APPROACH LIGHTING EQUIPMENT – Deleted.**
- **34 43 32 FLOODLIGHTING - EXTERIOR – Moved to electrical Division 26 (not airfield lighting related).**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



Division 34 (cont' d)

NEW SECTIONS

- **34 43 16.40 AIRFIELD APPROACH LIGHTING SYSTEM – CAT II STANDARD.**
- **34 43 13.23 AIRFIELD RUNWAY GUARD LIGHTS.**



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



Completion

- **French Translation.**
- **Target Date: 2011 for publication.**
- **NMS Website:**
<http://www.tpsgc-pwgsc.gc.ca/biens-property/ddn-nms/index-eng.html>
- **NMS Publisher:**
<http://www.tpsgc-pwgsc.gc.ca/biens-property/ddn-nms/editeurs-publishers-eng.html>



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



THE END

Presented by

Ty Huynh, M. Eng., P. Eng.

Phone: (416) 512-5758

Fax: (416) 512- 5535

Email: ty.huynh@pwgsc-tpsgc.gc.ca



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada



search ID: mfin1706



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Canada