

**RW-003  
JANUARY 2003**

# **ENGINEERING AND OPERATIONS**

## **NORTHERN AIRPORTS**

### **SPECIFICATION FOR**

### **BREAKAWAY COUPLINGS FOR USE IN**

### **MEDIUM INTENSITY AIRFIELD LIGHTING SYSTEMS**

**Manitoba  
Transportation and  
Government Services**



**TRANSPORTATION AND GOVERNMENT SERVICES  
NORTHERN AIRPORTS**

**SPECIFICATIONS FOR BREAKAWAY  
COUPLINGS**

**1. SCOPE**

This specification defines the general requirements applicable to breakaway couplings. The intent of this specification is to establish minimum acceptable electrical, mechanical, design and performance requirements, which all breakaway couplings must meet to ensure satisfactory and reliable operation. It is not intended to impose restrictions upon design or materials, which must conform to the FAA or Transport Canada TP 312 Technical standard. All FAA and Transport Canada TP 312 standards, current FAA and Transport Canada TP 312 specifications at time of contract, not specifically mentioned in this specification, will apply. Where there is a conflict between this specification and the latest FAA and Transport Canada TP 312 standard, this specification will apply.

**2. REQUIREMENTS**

- 2.01 Breakaway coupling must comply with Transport Canada TP 312 Specifications and must have a cast aluminum with a 60mm outer diameter and a standard 50mm pipe thread (NPT). A 5mm deep (approx.) breakaway groove must be cast into the coupling directly below the hexagon shoulder. A 3 mm hole must be provided in the hexagon shoulder for drainage purposes. (See Drawing #NAP-003) attached.
- 2.02 The breakaway coupling must be suitable length to result in an overall edge light height of not more than 350mm (14 inches).
- 2.03 The breakaway coupling must be coloured Aviation Yellow. The paint type must be a gloss alkyd enamel.

**3. WARRANTY**

- 3.01 All units must be guaranteed against failure for one year from date of acceptance by the Traffic Engineering Branch of the Department of Transportation and Government Services.

#### **4. INSPECTION AND ACCEPTANCE**

- 4.01 The vendor shall supply one evaluation sample of each breakaway coupling being supplied along with all testing and technical documentation.

Breakaway couplings that conform to this specification and are not currently in use by this Department must be submitted to the Traffic Signal Workshop for a one-year evaluation period by the Department. At the end of the evaluation period the supplier will be advised by the Traffic Operations Engineer if the equipment submitted for evaluation is acceptable.

The total cost of supplying this equipment for evaluation must be borne by the supplier. The bidder must complete the attached "Specification Compliance Summary" (attached). Failure to complete the summary will result in disqualification from the bidding.

- 4.02 All shipments of breakaway couplings must be delivered to the Mechanical Equipment Warehouse facility at 1550 Dublin Avenue, Winnipeg, Manitoba. At that time they will be inspected by the Traffic Engineering Branch of the Department of Transportation and Government Services.

Acceptance will be based on the supplied equipment meeting the requirements of this specification.

- 4.03 For additional technical information please contact Mark Seniuk at (204) 945-7335 office, or (204) 799-8682 cellular.