CONVERSION FACTORS FOR SI UNITS

TO CONVERT FROM TO MULTIPLY BY

STATION METER (m) 30.48

MILE KILOMETER (km) 1.609344

FOOT METER (m) 0.3048

INCH MILLIMETER (mm) 25.4

SQUARE FOOT SQUARE METER (m²) 0.09290304

SQUARE YARD SQUARE METER (m²) 0.8361274

ACRE SQUARE METER (m²) 4,046.873

CUBIC FOOT CUBIC METER (m³) 0.02831685

CUBIC YARD CUBIC METER (m³) 0.7645549

GALLON (US LIQUID) CUBIC METER (m³) 0.003785412

M. GAL CUBIC METER (m³) 3.785412

POUND-MASS (LBM) KILOGRAM (kg) 0.4535924

TON (SHORT) KILOGRAM (kg) 907.1847

POUND-FORCE (LBF) NEWTON (N) 4.448222

FOOTCANDLE LUX (lx) 10.76391

DEGREE FAHRENHEIT DEGREE CELSIUS (°C) (T°C -32)/1.8
MAGNETIC DECLINATION 17° 14' E

NOVEMBER 2002

ULTIMATE X-WIND RUNWAY
PROTECTION ZONE
500'x1750'

REMARKS:

- ULTIMATE X-WIND RUNWAY
  PROTECTION ZONE
- ULTIMATE X-WIND RUNWAY
  WITH 150' WIND SAFETY AREA
- ULTIMATE X-WIND RUNWAY
  THRESHOLD EXTENSIONS
- ULTIMATE X-WIND RUNWAY
  OBJECT-FREE AREA
- ULTIMATE X-WIND RUNWAY
  WITH 100' WIND SAFETY AREA
- ULTIMATE X-WIND RUNWAY
  WITH 100' WIND SAFETY AREA
- ULTIMATE X-WIND RUNWAY
  PROTECTION ZONE
- ULTIMATE X-WIND RUNWAY
  PROTECTION ZONE

11/02 ALP UPDATE
DESIGN: DES
DRAWN: DES
CHECKED: DES

11/02 AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
CITY OF EGEKIK

APPROVED: REVISIONS
DATE: REVISED

EGEGIK AIRPORT RUNWAY EXTENSION
AND IMPROVEMENT
AIP 3-02-0422-0299
ULTIMATE AIRPORT
LAYOUT PLAN

R&M CONSULTANTS, INC.
ENGINEERS GEOLOGISTS SURVEYSORS TESTLAB
PLANNERS COMPUTER SERVICES
9151 VANGUARD DRIVE, ANCHORAGE, ALASKA 99507
PH: (907) 274-3231 FAX: (907) 274-3232
EXISTING

BUILDINGS / FACILITIES

<table>
<thead>
<tr>
<th>EXISTING</th>
<th>FUTURE</th>
<th>DESCRIPTION</th>
<th>OBSTRUCTION MARKING</th>
<th>ELEVATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1</td>
<td></td>
<td>OUT EQUIPMENT STORAGE BUILDING</td>
<td>ROUGHING HOLE</td>
<td>127</td>
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<tr>
<td>No. 2</td>
<td></td>
<td>EXISTING ONLY</td>
<td>NON</td>
<td>99</td>
</tr>
<tr>
<td>No. 3</td>
<td></td>
<td>R/W STA. 2' X WIND TUBE</td>
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<td>99</td>
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<tr>
<td>No. 4</td>
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<td>R/W STA. 2' X WIND TUBE</td>
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<td>99</td>
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<tr>
<td>No. 5</td>
<td></td>
<td>R/W STA. 2' X WIND TUBE</td>
<td>NON</td>
<td>99</td>
</tr>
</tbody>
</table>

ULTIMATE

CITY OF EGEKIK

APPROVED

WHITNEY BODECKER, P.E.
PROJECT MANAGER

EGEI AIRPORT RUNWAY EXTENSION
AND IMPROVEMENT
AP 5-02-0422-0299
TERMINAL AREA PLAN
(EXISTING & ULTIMATE)

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EGEI AIRPORT RUNWAY EXTENSION
AND IMPROVEMENT
AP 5-02-0422-0299
TERMINAL AREA PLAN
(EXISTING & ULTIMATE)
F.A.R. PART 77 OBSTRUCTION TABLE

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>ELEV. OBSTRUCTION</th>
<th>HEIGHT OF PENETRATION</th>
<th>RECOMMENDATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>100' TOWER WITH 15' ANTENNA WITH MEDIUM INTENSITY STROBE LIGHT</td>
<td>-2.3' NO HAZARD</td>
<td>-12.5'</td>
<td></td>
</tr>
</tbody>
</table>

NOTES:
1. ALL ELEVATIONS AND CONTOURS ARE IN FEET BASED ON M.S.L.
2. CONVERSION TO N.A.V.D. 88 IS -12.5'.
3. DESIGNATED AIRPORT ELEVATION IS 104.8'.
4. THERE ARE NO OBSTRUCTIONS IN THE F.A.R PART 77 IMAGINARY SURFACES.
In 1999 Egegik Airport was served by two air taxi operators (Pensacola Airways and Half Airlift, with scheduled service to Anchorage, Seattle and Nome) during the summer fishing season and by one (Half Airlift) at other times of the year. The expansion is based on a 1% population growth in the North Peninsula region and on the assumption that air freight revenues will be about as high as the price for fresh fish. The increase in price for fresh products could result in higher fishery business tax revenues, as a local cash match to FAA-AIP funds being awarded for this project.

Airport Usage and Forecasts

Passenger

In 1999 Egegik Airport was served by two air taxi operators (Pensacola Airways and Half Airlift, with scheduled service to Anchorage, Seattle and Nome) during the summer fishing season and by one (Half Airlift) at other times of the year. The expansion is based on a 1% population growth in the North Peninsula region and on the assumption that air freight revenues will be about as high as the price for fresh fish. The increase in price for fresh products could result in higher fishery business tax revenues, as a local cash match to FAA-AIP funds being awarded for this project.

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The runway will be lengthened to 5,000 feet. Air taxi operators indicate that a 1,500' crosswind runway is adequate for small aircraft which will be operating at Egegik Airport in the near term.

**Phase I Proposed Improvements**

**Near term improvements at Egegik Airport will consist of upgrading the existing primary Runway 12/30 from a B-11 to a B-111 standard, and construction of a A-I cross wind runway, designated Runway 3/21. The Runway 3/21 safety area, and runway width will be constructed to accommodate a future upgrade to a B-11 standard. The improvements will include lengthening and widening the total primary runway safety area from 3,800 feet x 150 feet to 6,800 feet x 200 feet. The primary runway will be upgraded from 3,000 feet x 75 feet to 9,000 feet x 100 feet, with crushed aggregate surfacing. A new lighted '150' x 1,000' cross wind runway (150' x 2100' safety area) with crushed aggregate surfacing will be constructed. Other improvements will include relocating and extending the existing Group II taxiway to facilitate the new runway shoulder. The apron and primary taxiway would also be paved. The estimated cost for Phase I improvements, including planning, design, construction and construction management, is $4.62 million.

**Phase II Ultimate Improvements**

Long term, Phase II improvements include extending the cross wind Runway 3/21 from 1500' to 2400'; and also, upgrading primary Runway 12/30 from a B-11 to a B-111 standard. The estimated cost for Phase II, cross wind runway improvements in 1999 dollars, including planning, design, construction and construction management is $7.06 million.

The primary runway improvement would include widening the safety area from 300 feet to 500 feet, also, extending the runway from 100 feet to 150 feet. The runway would be reconstructed with crushed aggregate base course and asphalt pavement. The runway lights would be relocated to accommodate the new operating width. A new Group II lighted taxiway will be constructed connecting the existing apron to the new cross wind runway. A 250 foot x 220 foot covered parking area will be included within the taxiway, and for a freight aircraft-loading area on the existing apron. The apron expansion will be 1,500 feet x 220 feet, and will be constructed to the north in order to replace the removed apron area; and, for relocating the lease-lot area to the north.

**Wind Coverage**

Wind coverage will be increased from the current 84.9% to a combined coverage of 98.8% (13 knots) with the proposed near term improvements. If a crosswind runway is not constructed wind coverage for Runway 12/30 would be 91.2% (13 knots).

**Taxiway, Apron and Aircraft Parking**

Phase I

The existing Group II primary taxiway will be upgraded to Group IV standards. This upgrade will involve increasing the safety area width from 75 feet to 175 feet, and increasing the crushed aggregate surfacing, widening from 35 feet to 75 feet. Existing taxiway lighting will be constructed connecting the existing apron to the new cross wind runway. A 250 foot x 220 foot apron expansion will be constructed to the north on the apron, to allow for adequate maneuvering and for a freight aircraft-loading area on the existing apron. The apron expansion will be set back 300 feet from the runway centreline, in order to meet the future 500' runway standard.

Phase II

A 1,500' cross wind runway, expanding the apron to the north in order to replace the removed apron area; and, for relocating the lease-lot area to the north.