



RECEIVED

OCT 16 1998

CONNECTICUT  
SITING COUNCIL

SNET Mobility, Inc.  
500 Enterprise Drive  
Rocky Hill, Connecticut 06067-3900  
Phone: (860) 513-7730  
Fax: (860) 513-7614

October 13, 1998

Mr. Joel M. Rinebold  
Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

**Peter W. van Wilgen**  
*Director - Real Estate Operations*

Dear Joel:

This is in reference to our meeting of September 29, 1998 with Mr. Mario Zavarella, Town Planner of Windsor, and our planned Bellboy tower replacement behind our Windsor Central Office building. I wish to confirm certain items discussed at that meeting so that everyone is comfortable with the replacement tower and the work to be done.

The new tower will be installed in the same location as the existing one. The concrete base for the new tower will be constructed around the existing tower foundation, with the existing tower then being removed and the new one installed in its place. The new tower will be the same height, but will be somewhat wider in order to accommodate the present and future platforms, which will be of a low profile design. The future platform will not be installed initially, but will be added later after a second carrier has requested use of the location and has been approved by the Connecticut Siting Council.

The new tower will be painted the same green color as the existing one, either at the factory or on-site after installation. New trees (white pines) will be planted around the base of the tower to replace and add to the ones which will need to be removed for the new tower construction.

Tom Fenton, our Construction Manager, will oversee the construction of the tower replacement as he has done at other locations, and I'm sure the Council and Town will be pleased with his work.

Very truly yours,

Copies to: Mario Zavarella, Tom Fenton, Paul Brann, Marshall West,  
Bruce Woundy



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square  
New Britain, Connecticut 06051  
Phone: (860) 827-2935  
Fax: (860) 827-2950

July 13, 1998

Peter J. Tyrrell  
Springwich Cellular Limited Partnership  
500 Enterprise Drive  
Rocky Hill, CT 06067-3900

Re: Springwich Cellular Limited Partnership notice of intent to modify an existing telecommunications facility located at Southern New England Telephone Central Office on 419 Broad Street in Windsor, Connecticut.

Dear Attorney Tyrrell:

At a public meeting held on July 9, 1998, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility in Windsor, Connecticut, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated June 24, 1998, with the following conditions:

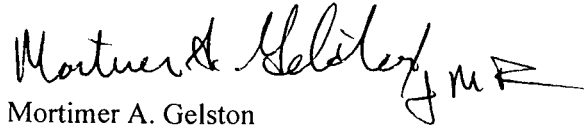
- Development of a landscaping plan to protect existing vegetation for screening purposes;
- Installation of only one antenna platform, which shall be a low-profile platform;
- Painting of the new tower a shade of green to match the existing tower;
- No fencing or equipment building to be installed on the site; and
- No tower lighting.

The modifications as conditioned are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequency electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequency now used on this tower. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Peter J. Tyrrell  
Page 2

Thank you for your attention and cooperation.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Mortimer A. Gelston". The signature is written in black ink and includes a stylized flourish at the end.

Mortimer A. Gelston  
Chairman

MAG/RKE/jlh

c: Honorable Mary B. Hogan, Mayor, Town of Windsor  
Mario Zavarella, Town Planner, Town of Windsor

**Springwich Cellular Limited Partnership**

500 Enterprise Drive  
Rocky Hill, Connecticut 06067-3900  
Phone: (860) 513-7755  
Fax: (860) 513-7614

**Peter J. Tyrrell**  
*General Counsel*

June 24, 1998

Mr. Mortimer A. Gelston, Chairman  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

**RECEIVED**

JUN 25 1998

CONNECTICUT  
SITING COUNCIL

**Re: Springwich Cellular Limited Partnership - Windsor Cell Site**

Dear Chairman Gelston:

Springwich Cellular Limited Partnership ("SCLP") requests approval to replace its existing 100 foot monopole tower located in Windsor, Connecticut. This tower measures 12.45 inches at the base and tapers to 3.29 inches at the top of the tower. The tower is currently located at the Southern New England Telephone (SNET) Central Office premises at 419 Broad Street in the town of Windsor, Connecticut. This existing tower was constructed in 1971 for the purpose of conducting SNET vehicle to vehicle radio communication.

Several years ago (1994), the Connecticut Siting Council approved an exempt modification granting SCLP permission to alter the structure by placing two additional whip antennas on this tower to support their cellular transmission. All associated radio equipment is presently installed in the adjacent central office building.

Since the 1994 installation, customer demand and changing technology requires that SCLP request that the Council review and approve a new proposal for enhanced cellular service. This proposal will address the needs of our customers and at the same time allow SCLP the opportunity to extend its offering of digital service to the Windsor area.

Please accept this letter as notice of intent, pursuant to R.C.S.A. Section 16-50j-72(b)(2) and (3) to construct an exempt modification of an existing facility tower. In further compliance with R.C.S.A. Section 16-50j-73, a copy of this letter is being sent to the First Selectman of Windsor.

Presently, our current omni directional antenna configuration brings the existing tower to its design load capacity. These antennas do not support our current plans for offering digital service. The digital system necessitates the need to convert our existing antenna array to a directional system.

The existing monopole's current size does not permit use of this tower for directional expansion or multiple carrier use. This tower was constructed by the parent company (SNET) in 1971 and is not capable of supporting either proposal listed below. Due to these circumstances, SCLP would like to offer two different proposals for the Council's consideration. They are:

First Proposal:

SCLP would like to replace the existing light duty monopole with a new 100 foot monopole, 34 inches in diameter at the base and tapering to 14 inches at the top, to support an antenna platform which will be mounted at the top of the tower (See attachment #1). This platform will support the mounting of (9) nine directional antennas (Swedcom ALP Model 11011N) which will be secured to the platform. SCLP also plans to install additional radio transmission equipment inside the existing central office building.

Second Proposal:

As an alternative, SCLP would like to suggest that the Council consider allowing SCLP to replace the existing tower with a 100 foot monopole, 34 inches in diameter at the base and tapering to 14 inches at the top, to support two (2) platforms for mounting two sets of directional antennas (See attachment #2). The first platform would be equipped as described in the first proposal. The second platform would be installed in the future when a specific need is determined, with approximately a ten (10) to fifteen (15) foot vertical separation. This arrangement would allow for diversity when considering the equipment space requirements of future clients, due to different antenna manufacturers' makes and models. These antennas would be mounted in the same fashion as described above, but on the second platform. Prior to SCLP installing this second platform for another wireless service provider, it would seek the approval from the Connecticut Siting Council.

Neither of these proposed applications of SCLP's antennas and equipment to this tower site constitute a substantial environmental impact, since such additions do not cause a significant change or alteration in the physical or environmental characteristics of the site. Rather, the planned changes to the existing facility tower falls squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b) (2) and (3). This proposed modification will not increase the tower's height nor will it extend the site's boundaries.

Finally, this proposed addition will not increase the noise levels at the existing facility by six decibels or more. The operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density to a level at or above the ANSI standard. A "worst-case" calculation for this proposal, from a point of interest at the base of the tower, indicates that SCLP's cellular operations result in a Power Density

Calculation of  $0.0783 \text{ mW/cm}^2$ , which is 13.34 % of the maximum permissible emissions allowed in a uncontrolled environment. (See chart listings) This calculation was arrived at using a platform height of 100 ft. and an operating power of 100 watts per channel. Final calculations for additional users will be submitted if and when a formal application is submitted to the Connecticut Siting Council for approval. However, as you can see by the chart, adding an additional PCS provider is still well within the acceptable operating parameters.

#### Worst Case Scenario

Service/ Point of interest	Band (MHz)	Power per Channel (watts)	# Channels	Height (ft.)	Power Density ( $\text{mW/cm}^2$ )	% of MPE ( $0.5867\text{mW/cm}^2$ ) Uncontrolled
Cellular	880 MHz	100 watts	19	100 ft.	0.0783	13.34%
Future PCS	1962.5 MHz	122 watts	11	85 ft.	0.0784	5.99%
<b>Total</b>						<b>19.33%</b>

For the foregoing reasons, Springwich Cellular Limited Partnership suggests that its proposed alterations would not cause a significant change or alteration in the physical and environmental characteristics of the site. SCLP further submits that the changes comply with R.C.S.A. Sections 16-50j-72(b)(2) and (3) and therefore requests a determination that this construction constitutes an exempt modification to the existing facility tower site under R.C.S.A Section 16-50j-72(b)(2) and (3).

Thank you for your cooperation and attention to this matter.

Sincerely,



Attachments

cc First Selectman of Windsor

**Springwich Cellular Limited Partnership**

500 Enterprise Drive  
Rocky Hill, Connecticut 06067-3900  
Phone: (860) 513-7755  
Fax: (860) 513-7614

**Peter J. Tyrrell**  
*General Counsel*

June 24, 1998

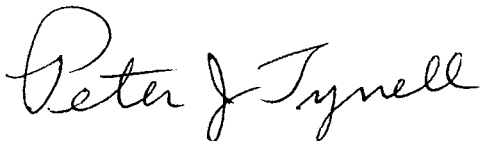
The Honorable Mary Hogan, Mayor  
Town Hall  
275 Broad Street  
Windsor, Connecticut 06095

Dear Mayor Hogan:

Springwich Cellular Limited Partnership (SCLP) plans to install antennas and associated equipment at the existing tower facility owned by Southern New England Telephone and located at 419 Broad Street in Windsor. As required by Section 16-50j-73 of the Regulations of Connecticut State Agencies (R.C.S.A.), please accept this letter and the attached letter to the Connecticut Siting Council dated June 24, 1998, as notice of intent to construct an exempt modification to an existing facility tower pursuant to R.C.S.A Section 16-50j-72(b)(2) and (3).

The attached letter fully describes SCLP's proposal. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at (860) 513-7755 or Mr. Joel Rinebold, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

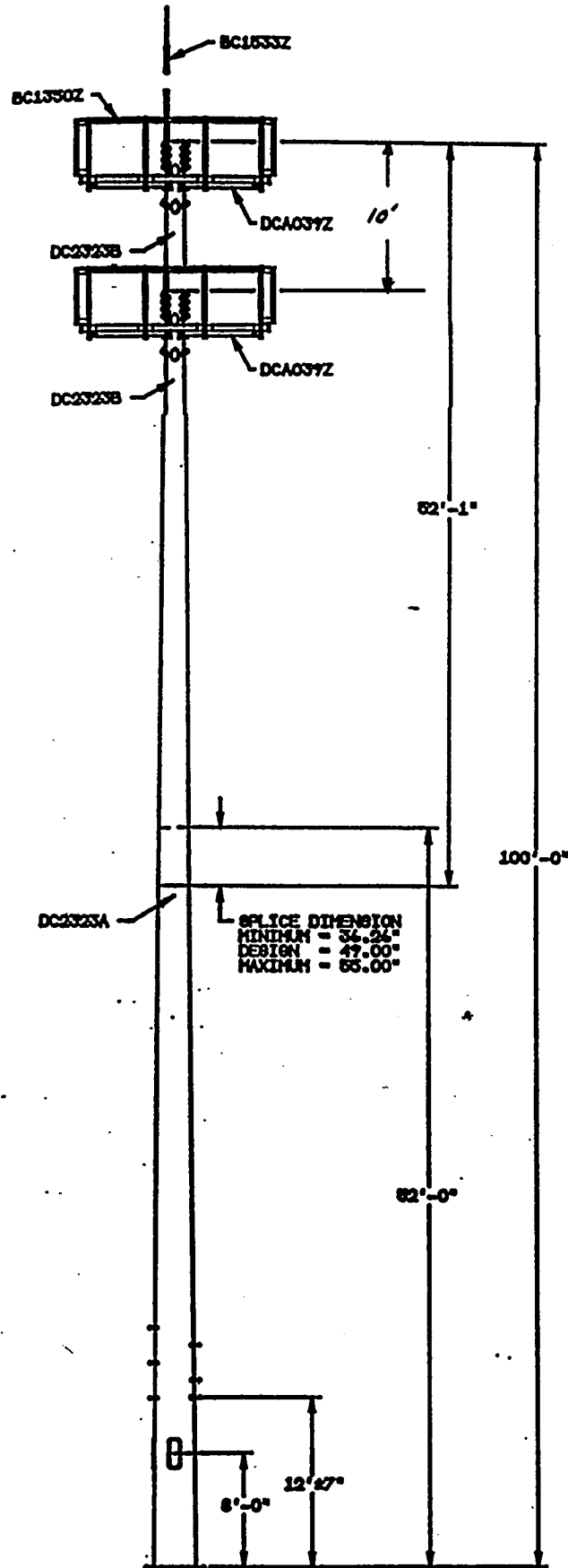


Enclosure

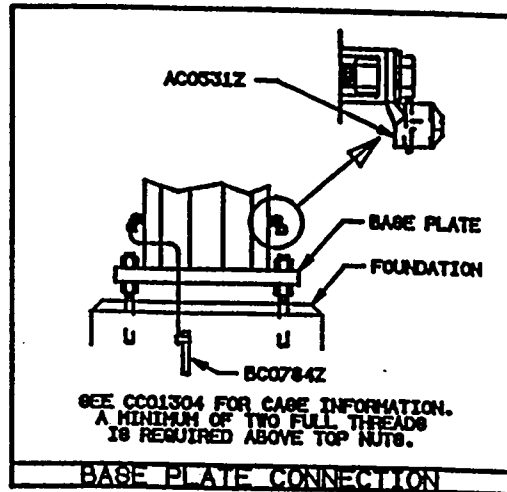




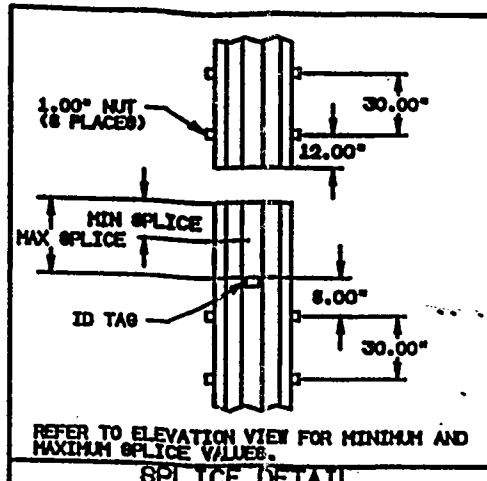
# ATTACHMENT #2



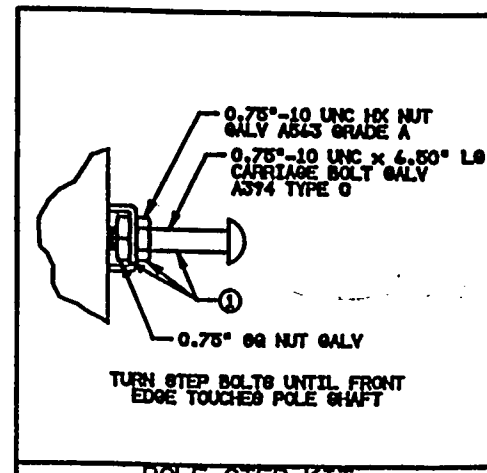
ELEVATION VIEW  
SEE FABRICATION DRAWINGS  
FOR ADDITIONAL DETAILS



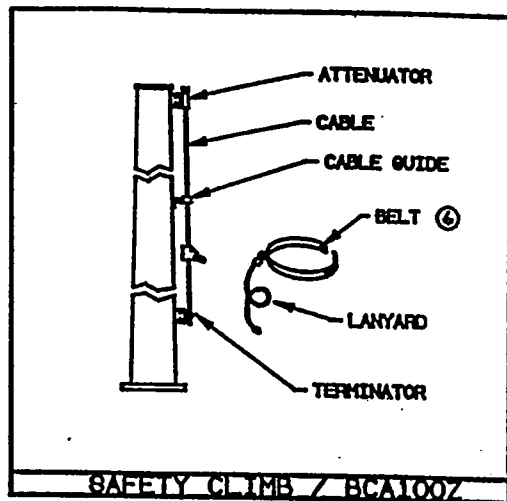
BASE PLATE CONNECTION



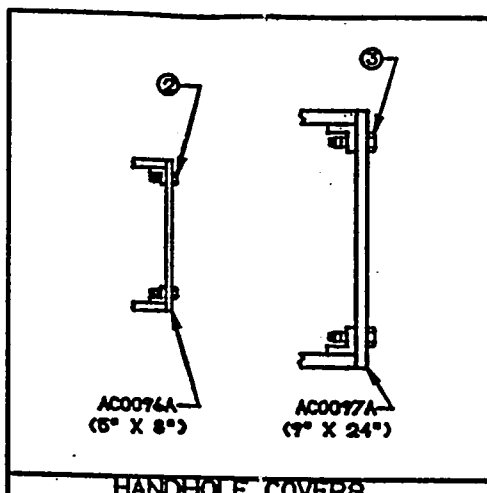
SPLICE DETAIL



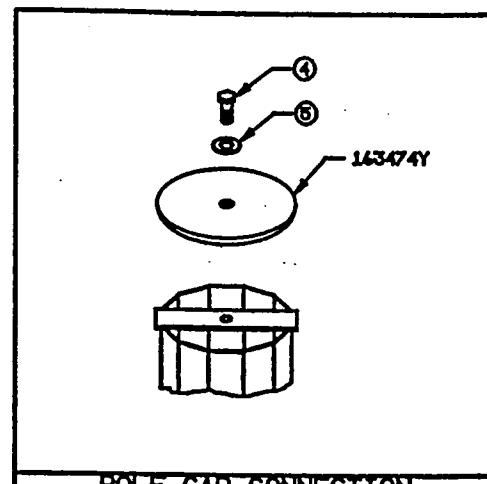
POLE STEP KIT



SAFETY CLIMB / BCA100Z



HANDHOLE COVERS



POLE CAP CONNECTION

## NOTES:

- POLE SHAFT-GOVERNING REACTIONS:  
 MOMENT = 13,717 IN-KIPS  
 SHEAR = 14,754 #  
 VERTICAL = 14,478 #
- COMPONENT IDENTIFICATION: TAG LOCATIONS ARE INDICATED BY CALLOUTS ON DRAWING. "TAG MARK" IN BILL OF MATERIAL SHOWS FIRST 4 DIGITS ON EACH TAG. SUBSEQUENT DIGITS WILL INDICATE SEQUENCE OF MANUFACTURER.
- ASSEMBLY AND ERECTION GUIDELINES: SEE VALMONT COMMUNICATION POLE INSTALLATION GUIDELINE 1012.
- SLIP JOINT JACKING FORCE:  
 MINIMUM = 25,000#  
 MAXIMUM = 70,000#
- WEIGHT: WEIGHT IN TITLE BLOCK IS TOTAL STRUCTURE WEIGHT EXCLUDING ANCHORAGE.
- FINISH: GALVANIZED PER ASTM A-123.
- POLE DESIGN CONFORMS TO EIA/TIA-222-E FOR:  
 100 MPH WIND WITH NO ICE, EXPOSURE "B"  
 87 MPH WIND WITH 1/2" ICE, EXPOSURE "B".
- DESIGN LOADINGS:  
 1-CELLULAR PLATFORM MOUNTED @ 77' ELEV.  
 12-ALP212'S MOUNTED ON PLATFORM FACES.  
 3-DB807'S MOUNTED ON PLATFORM CORNERS.  
 1-CELLULAR PLATFORM MOUNTED @ 87' ELEV. (F)  
 12-ALP212'S MOUNTED ON PLATFORM FACES. (F)  
 3-DB807'S MOUNTED ON PLATFORM CORNERS. (F)

BILL OF MATERIAL (SHIPPING QTY = 1 FOR ALL)				
VALMONT PART NUMBER	DESCRIPTION	UNIT WEIGHT (LBS)	QTY PER STR	QTY PER STR
DC2 323A	SECTION ASSEMBLY	4,400	1	1
DC2 323B	SECTION ASSEMBLY	2,826	1	1
CC0 1304	CAGE ASSEMBLY	1,374	1	1
---	NOTE PLATFORM ASSEMBLY (DCA037Z)	1,277	1	1
---	NOTE SAFETY CLIMB ASSY (BCA100Z)	37	1	1
---	NOTE E.I.A. GROUNDING (BC0784Z)	20	1	1
---	NOTE RAIL KIT ASSEMBLY (BC1530Z)	412	1	1
---	NOTE LIGHTNING ROD KIT (BC1533Z)	49	1	1
---	NOTE GROUND LUG KIT (AC0531Z)	1	2	2
MISCELLANEOUS				
AC0076A	HANDHOLE COVER PLATE (6 X 8)	5	12	12
AC0077A	HANDHOLE COVER PLATE (7 X 24)	7	2	2
143474Y	POLE CAP COVER PLATE (15" DIA)	13	1	1

VALMONT PART NUMBER	DESCRIPTION				QTY PER STR
	HARDWARE SIZE (IN)	GENERAL	FINISH	ASTM SPEC.	
1 2134A		STEP KIT	HDGV		74
2 14403B	0.25 0.75	SCREW	8.8, A410		24
3 14147	0.38 1.00	SCREW	8.8, A410		7
4 14117	0.75 1.75	CAP BOLT	HDGV, A325		1
5 142054		0.75 FLAT	HDGV, F434		1
6 LABEL		SAFETYBELT			1

\* PER ASTM A325-71C, EXCLUDE SECTIONS 4.3 & 7.2

DUPLICATE DRAWING DISTRIBUTION  
 BRENNER TX

RED11663 100' MONOPOLE  
 DWG SIZE B CLASS CODE (1) & CLASS NO. (3) 650

DATE	BY	CHKD	DATE	BY	CHKD
04/17/95	LVG	10/17/95	LVG	10/17/95	LVG

REVISION DESCRIPTION

NO.	DATE	DESCRIPTION
1	04/17/95	REV'D PER CUST REQUEST
2	11/25/95	REV'D PER CUST REQUEST

MATERIAL PROCESSING

MATERIAL	PROCESSING	REWORK
1125-78	1125-78	1125-78

VALMONT

SHAFT INFO					
QTY	LENGTH	BASE CO	TOP CO	THK	HAT
1	82'-00"	24.00"	25.34"	0.313"	8-22
1	82'-01"	24.45"	14.00"	0.250"	8-22

# Swedcom Corporation

## ALP 11011-N

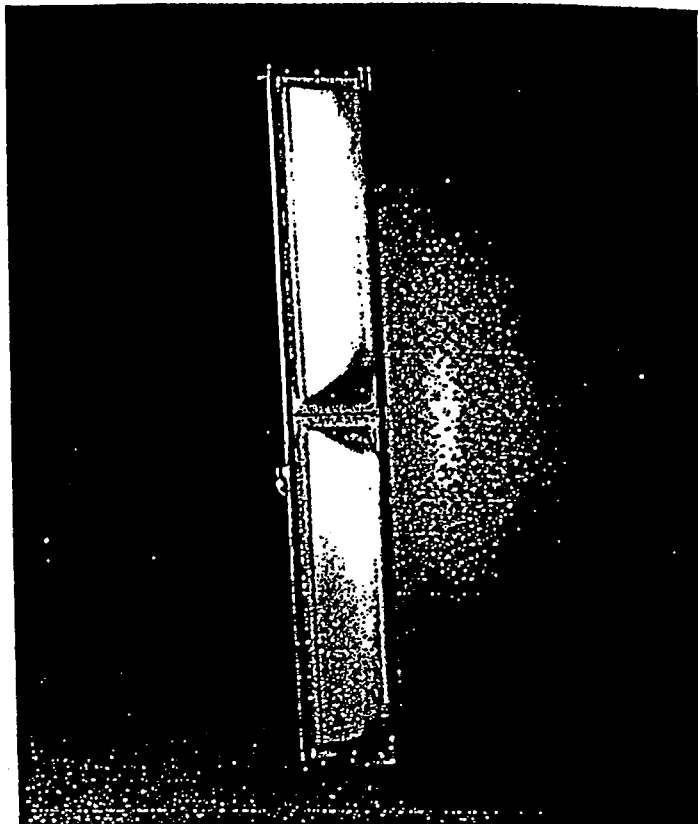
LOG-PREIODIC REFLECTOR ANTENNA

110 Degrees 11 dBd

### Features:

- Broadbanded. (800-900 MHz)
- Low backlobe radiation. Front to back ratio better than 25 dB.
- Low intermodulation products.
- Low wind-load.
- Low weight.
- Small size.
- Rugged design.

Please see the following pages including radiation patterns for ALP 11011-N.



### Electrical Specifications:

Frequency range:	806-896 MHz
Impedance:	50 Ohm
Connector:	N female
VSWR:	Typ. 1,3:1 max 1,5:1
Polarization:	Vertical
Gain:	11 dBd
Front to back ratio:	>25 dB
Intermodulation: (2x25 W)	IM5 - 107 dBm
Power Rating:	500 W
H-Plane: -3 dB	110°
E-Plane: -3 dB	15°
Lightning Protection:	DC Grounded

### Mechanical Specifications:

Overall height:	51 in. (1320 mm)
Width:	8.3 in. (210 mm)
Depth:	11.4 in. (290 mm)
Weight incl. mounting items:	24.5 lbs (11 Kg)
Rated wind velocity:	113 mph (180 Km/h)
Wind Area (CxA/Front):	3.7 sq.ft (0.34 sq.m)
Lateral thrust at rated wind:	
Worst case	530 N

### Materials:

Radiating elements:	Aluminum
Element housing:	Grey PVC
Reflector:	Aluminum
Mounting Hardware	
clamps:	Hot dip galvanized steel
bolts:	Stainless steel

Manufactured by: Allgon System AB

