PLATE 41. Pentocostal Church - hurricane shelter. Low pitched roof, loss of sheeting at gable end.

Shuttered windows are good hurricane resistant feature, but the low pitch of the roof is "unsafe" unless specific provision is made to strengthen the roof structure.

PLATE 42. Aerial view of Technical College and Secondary School. NoteTypical roof failure at gable ends. Roof pitch too shallow for "normal" construction .

PLATE 43. Montserrat Secondary School. Well constructed hipped roof with close boarding. This roof performed satisfactorily.

PLATE 44. The roof was completely destroyed and some windows blownout. Rebuilding to improved standards is necessary.
(Chemistry Lab at Secondary School, Dagenham)

PLATE 45. Harris School. 60mm thick sandwich panel walls. Gable and walls, windows and doors blown in.

Nearby houses lost roofs - some damage may have been caused by flying debris.

PLATE 46. Montserrat Secondary School. Loss of sheeting of hipped roof

PLATE 47. Bethel School. Rafters failed at ridge joint.

PLATE 48. Bethel School. Very inadequate roof framing contributed to the major damage.

PLATE 49. Bethel School. Loss of roof cladding and rafters due to inadequate construction

PLATE 50. St John's School. Complete loss of roof cladding from pitched roof and flat roof of open assemb ly area.

Roof Purlins, Closeboarding and roof covering must be securely fixed to the structure. In this case the structure survived but the roof covering and its support were sucked out.

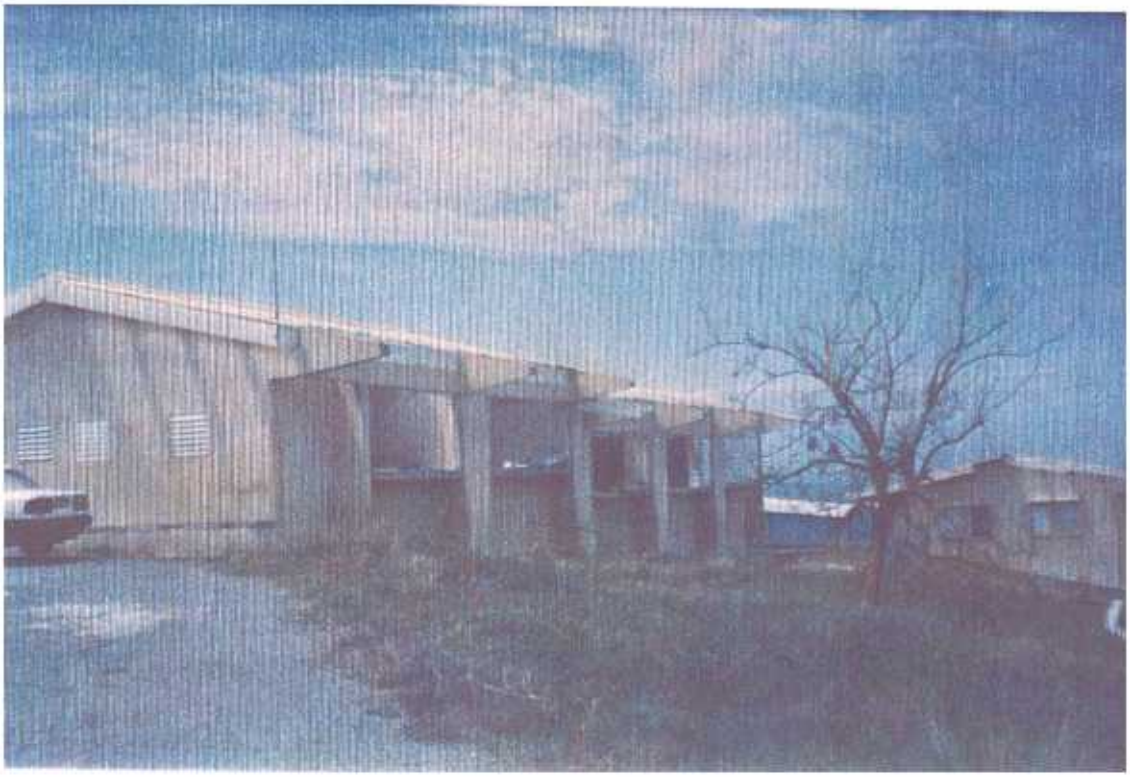

PLATE 51. Brades School. Sheeting loss from canopy roofs, windows blown out.

PLATE 52. Brades School. Large 12'x 5' aluminium louvre window blown out on both long elevations.

Asbestos roof sheeting blown away or punctured by flying debris. Use of Asbestos sheeting is to be discouraged as asbestos is easily broken by flying objects.

PLATE 53. Aerial view of Plymouth. This view shbws the extensive destruction of roofs. However the large amount of debris provides an impression of greater destruction than was actually the case. There was significant loss of roofs and building contents, but some large buildings are still standing and can be repaired quickly.

PLATE 54. General view of damage to the outskirts of Plymouth.

PLATE 55. Emerald Isle Hotel. General loss of roof. Note large sections of roofs on ground nearby. These gable ended roofs with shallow pitches are vulnerable.

PLATE 56. View Point Hotel. Loss of roof cladding on flat pitched roof section.

Roof units of hexagonal shape with hipped roofs suffered some damage

PLATE 57. View Pointe Hotel - Room Unit. An example of good roof framing. This level of construction must be maintained for all elements of the roof to ensure resistance to high winds.

PLATE 58. View Pointe Hotel. Hipped roof performed with limited damage on hexagonal room units.

PLATE 59. View Pointe Hotel. Holding down straps, straightened out by uplift forces on unit that has lost its roof.

The construction method used appears satisfactory, but the fixing of the straps to the timber rafters may not have been positive, allowing the high wind forces to take advantage of a weak connection.

PLATE 60. View Point Hotel. Another view of the units that have their roofs and those that don't.