WHAT IS CLAIMED IS:

1. A mask and headgear system comprising

a mask, the mask comprising a frame and a seal supported by the frame,

headgear connected to the mask, and

a break-fit assembly comprising a first component, a second component, and a flexible sheath enveloping the first and the second components, wherein the break-fit assembly is configured to elongate upon separation of the first and the second components upon the application of a force exceeding a preselected force, the mask, headgear, and break-fit assembly together defining a loop that elongates with forces that exceed the preselected force, wherein the break-fit assembly resists elongation and the first and the second components remain connected in use if a force less than the preselected force is applied, and upon application of a force exceeding the preselected force, the resulting elongation of the loop is sufficient to allow a user to don and position the system on the user's head and face or to allow the user to remove the system from the user's head and face, and wherein the flexible sheath acts to guide reconnection of the first and second components, and the preselected force is greater than a maximum of a lifting force generated by the mask when breathing gases are supplied to the mask in use.

2. The mask and headgear system of claim 1, wherein the break-fit assembly joins the headgear and the mask.

3. The mask and headgear system of claim 1, wherein the break-fit assembly is positioned on the frame of the mask.

4. The mask and headgear system of claim 1, wherein the break-fit assembly is positioned on the headgear.

5. The mask and headgear system of any one of claims 1-4, wherein the break-fit assembly has a use length when the first and the second components are connected.

6. The mask and headgear system of claim 5, wherein the break-fit assembly returns to the use length after the user has donned the system.

7. The mask and headgear system of claim 6, wherein the break-fit assembly automatically returns to the use length after the user has donned the system.

8. The mask and headgear system of any one of claims 1-7, wherein the flexible sheath provides a return force between the first component and the second component upon separation of the first and the second components.

9. The mask and headgear system of any one of claims 1-8, wherein the headgear is substantially nonstretch or substantially completely nonstretch.

10. The mask and headgear system of any one of claims 1-9, wherein the headgear comprises a generally inelastic portion.

11. The mask and headgear system of claim 10, wherein the generally inelastic portion extends between two break-fit assemblies.

12. The mask and headgear system of any one of claims 1-11, wherein the break-fit assembly comprises a magnetic coupling, wherein the first and the second components are magnetic members.

13. The mask and headgear system of claim 12, wherein the magnetic members are fixed axially within the flexible sheath.

14. The mask and headgear system of claim 12 or 13, wherein the magnetic members exert a coupling force of greater than 4N.

15. The mask and headgear system of any one of claims 12-14, wherein the magnetic coupling provides a biasing force for the break-fit assembly.

16. The mask and headgear system of any one of claims 1-11, wherein the break-fit assembly comprises a mechanical coupling.

17. The mask and headgear system of claim 16, wherein the mechanical coupling requires a first force to disconnect and second force to reconnect, the second force being less than the first force.

18. The mask and headgear system of claim 17, wherein the first force is greater than 4N.

19. The mask and headgear system of any one of claims 16-18, wherein the break-fit assembly further comprises a biasing member.

20. The mask and headgear system of claim 19, wherein the biasing member comprises a spring.