

### Sikorsky CH-53H Sea Stallion helicopter windshields and central panels



U.S. Marine Corps photo/Lance Cpl. James B. Hoke

With the rigorous operating requirements of the CH-53H, PPG has designed today's transparencies using PPG CR-39<sup>®</sup> monomer, a lightweight plastic material with durability to withstand high temperatures and high altitudes while maintaining critical optical quality. PPG CR-39 monomer has been used for decades in eyewear.

#### Military transparencies leader

A leading and experienced manufacturer of windshields, canopies, windows, blast barriers and specialty transparencies for military applications, PPG has a broad range of capabilities to design and produce advanced-technology transparencies that meet the demanding requirements of military air and surface operations.

PPG offers a variety of transparent structural materials tailored to aerospace applications.

Plastic substrate materials currently in production include acrylic that is strong and lightweight, and polycarbonate that has superior impact resistance and a high strength-to-weight ratio. PPG also is developing exciting, new transparent structural materials with superior structural properties that have the potential to replace both acrylic and polycarbonate.

For example, new PPG OPTICOR<sup>™</sup> Advanced Transparency Material provides unprecedented performance and unique design capabilities that meet the demanding needs of today's aerospace industry. This innovative high-performance, proprietary PPG plastic is superior to other commonly used aerospace plastics, offering exceptional resistance to abrasion, chemicals, ultraviolet degradation and fire. Because it resists crazing, PPG *Opticor* Advanced Transparency Material maintains optical clarity. It has lower density than stretched acrylic and low moisture absorption, and it is an excellent substrate for metallic and nonmetallic coatings. Unique non-uniform shapes can be created with PPG *Opticor* Advanced Transparency Material.

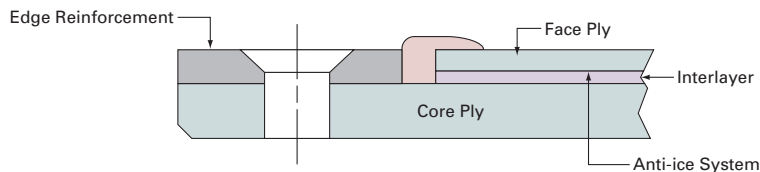
PPG proprietary interlayers bond the plies together and provide ballistic properties, bird-impact resistance and pressure "fail-safe" capability.

#### Windshield and central panels

Features	Benefits
Original-equipment supplier	<ul style="list-style-type: none"> <li>• Proven reliability</li> <li>• Latest design and upgrades</li> <li>• Worldwide customer and technical support</li> </ul>
PPG CR-39 <sup>®</sup> monomer	<ul style="list-style-type: none"> <li>• Combines optics of glass with durability of a thermoset plastic</li> <li>• Superior scratch, heat and chemical resistance</li> <li>• Lightweight</li> </ul>
Advanced composite laminate	<ul style="list-style-type: none"> <li>• Superior bird-strike performance</li> </ul>
Proprietary heating system	<ul style="list-style-type: none"> <li>• Uniform, full-coverage heating</li> <li>• Superior optics</li> </ul>

# Sikorsky CH-53H Sea Stallion helicopter windshields and central panels

## Windshields and central panel



### Part numbers

Pilot windshield	120400-01
Copilot windshield	120400-02
Pilot windshield	120400-03
Copilot windshield	120400-04
Central panel	120300-03
PPG Clarity™ Transparency Cleaning System	599306

Proprietary electrical heating systems provide anti-ice/anti-fog protection.

PPG advanced coatings and technologies help protect transparencies and aircrews from operational or environmental threats, and provide a variety of performance enhancements. A few of these are solar heat reduction, laser protection, and electromagnetic interference (EMI) shielding. Such technologies are designed to be compatible with night vision systems and other optical requirements.

PPG transparencies have flown and participated in numerous air and surface military missions. The company is a leader in its transparency technical capabilities and infrastructure, OEM and operator support, and ability to supply parts worldwide on a timely and affordable basis.

### CLARITY™ Transparency Cleaning System

PPG *Clarity* Transparency Cleaning System was developed for easy removal of debris on plastic transparencies while adding protection to facilitate future cleanings and potentially increase service life. In a two-part process, a wet wipe saturated with a proprietary blend is applied to the substrate to remove superficial debris, and then a dry wipe is used to take off any haze. Kits containing both types of wipes are available. Contact your PPG aerospace sales representative for more information and to order PPG *Clarity* Transparency Cleaning System.

### Ordering information

Orders may be placed through PPG aerospace's worldwide network of application support centers (ASCs). For the ASC nearest you, visit [www.ppgaerospace.com](http://www.ppgaerospace.com).

In North America, call toll-free +1 (800) AEROMIX.

Pricing, warranty and delivery details are available from your PPG aerospace sales representative.

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