



1  
00:00:00,020 --> 00:00:04,180  
[music] NASA's P-3 research aircraft

2  
00:00:04,200 --> 00:00:08,360  
has landed in Thule, Greenland, and Operation IceBridge is ready to

3  
00:00:08,380 --> 00:00:12,550  
kick off its 2013 Arctic campaign. Only an eight-hour flight

4  
00:00:12,570 --> 00:00:16,740  
heading almost due north from the Virginia coast, Thule can feel like another planet,

5  
00:00:16,760 --> 00:00:20,910  
even without the occasional 60-mile-an-hour windstorm.

6  
00:00:20,930 --> 00:00:25,070  
But this year, the team was welcomed by sunny skies

7  
00:00:25,090 --> 00:00:29,260  
and surprisingly warm 40-degree temperatures and is ready to take off on its

8  
00:00:29,280 --> 00:00:33,320  
first science flight of the year. But let's step back.

9  
00:00:33,340 --> 00:00:37,480  
An IceBridge campaign doesn't actually begin here. The planning for the mission

10  
00:00:37,500 --> 00:00:41,620  
goes back months, when scientists met to hash out this year's objectives.

11  
00:00:41,640 --> 00:00:45,740  
Many different flight plans were on the table. Some focused on sea ice,

12  
00:00:45,760 --> 00:00:49,850  
some on outlet glaciers, and some on Greenland's ice sheets.

13  
00:00:49,870 --> 00:00:53,920

Because the total flight hours in a campaign are strictly limited, it

14

00:00:53,940 --> 00:00:57,970

becomes a competitive process, where only the most valuable flight plans

15

00:00:57,990 --> 00:01:02,020

rise to the top. SCIENTIST: ... we agreed earlier that our strategy was to be

16

00:01:02,040 --> 00:01:06,200

that at a threshold, at least this area would get covered every year.

17

00:01:06,220 --> 00:01:10,380

About two or three weeks before deploying to Greenland, the IceBridge

18

00:01:10,400 --> 00:01:14,590

team began to integrate the radars, laser altimeters,

19

00:01:14,610 --> 00:01:18,790

and other instruments onto the aircraft, at NASA Goddard's Wallops Flight Facility

20

00:01:18,810 --> 00:01:23,040

in Virginia. It's only then, and after a few calibration flights

21

00:01:23,060 --> 00:01:27,210

to ensure everything looks good, does an IceBridge campaign truly begin.

22

00:01:27,230 --> 00:01:31,390

For the next few weeks,

23

00:01:31,410 --> 00:01:35,580

IceBridge will be flying missions out of Thule, to study sea ice in the Arctic ocean,